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ST-Talk Pro
ST-Talk Professional 2.0
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ATARI SM124

Owner's Guide

ST-Talk Professional™

PRODUCT DESIGN and PROGRAMMING
by
John DeMar

OWNER'S GUIDE
written by
Hank Fay

Quantum Microsystems Inc.
PO Box 179
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315-451-7747
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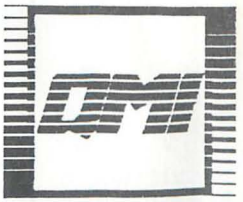

A Note On Copy-Protection And Piracy

ST-Talk Pro is not copy-protected. We spent a bit of time coming up with schemes that would protect our investment of time and money, and decided that the complications that would result from these schemes would violate our philosophy which led to the creation of this program.

We have embedded a unique serial number in your program, keyed to the registration card, and showing in the About ST-Talk item on the Desk Menu. The purpose in having this serial number is twofold.

First, we know that there will be improvements in coming versions of ST-Talk Pro *which will make registration worthwhile.* Thus, we expect most folks to register. And if we find a pirated copy which has the serial number embedded in it, we will prosecute the registered owner.

Of course it only takes one pirated version to make the rounds; what's to keep a person from pirating an unregistered copy? Nothing, except conscience of course, and if conscience were universal we would have quite a different world, wouldn't we?

Which brings us to the second reason for having a serial number: *to give you an excuse not to give the program to a friend who asks for a copy.* The problem as we see it is you will like the program enough to brag. And we appreciate the problem that is likely to arise when the person to whom you are bragging says:

"Hey, how about giving me a copy?"

We are not suggesting that you attempt to raise the moral awareness of your friend. If he doesn't already appreciate that "getting" a copy from you is a form of stealing, just as surely as if he lifted the wallet of the person who programmed ST-Talk Pro, then nothing you say is going to do much good. Instead, the embedded serial number allows you to say something like the following:

"My serial number is on this, and I sent my registration in because I want the updates and upgrades. Besides, they're giving away $1,000 to 1 out of every 10,000 registered owners. I trust you, but I don't want to take any chances."

Your friend might reply that:

"I just want to take a look at it, to see if I want to buy it."

Your reply might be:

"I'm still not willing to take a chance, but there's a demo up on GEnie and CompuServe you can download, to see if you'd like to buy it."

It would be nice if your friend understood that you choose to not give a copy away because you value the program and the people who produced it, and want to be fair to them. But if your friend understood that, he wouldn't have asked in the first place!

ST-Talk Pro

Owner's Guide

(c)1988, GMI

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Preface

This is the first full-release version of ***ST-Talk Professional***, labelled 2.0. The numbering begins with 2, in deference to the original ST-Talk communications program.

ST-Talk Pro developed from the philosophy of the developer: to create a telecommunications program which met the computer novice and led him to the full power of telecommunications, and to challenge the experienced computer user with creative possibilities. And to make it affordable by all.

One method of program development has it that the manual is written before the program is written. This is an engineering model, in which specifications are made, and products developed to specification. Manuals written in that manner typically read like engineering reference works -- which they are. And the programs they describe have the soul and spirit of, well, a bridge, or skyscraper.

The other model of program development follows the artistic method, where the artist knows what he wants to convey, but not all the ways in which it will be conveyed. Writing a program, and a manual, under this process is an exciting process: change can be neverending.

The purpose of the manual is not simply to describe, but also to teach. Rather than list, attention is drawn to what is thought to be important, or to what is thought to be likely overlooked. Rather than making the editorial judgment that all is equally important, the editorial judgment was made that some parts are more important than others.

The layout of the manual is different: large horizontal pages. The design came about by accident, but experimenting with page layouts using multiple graphics convinced us that this format was most suited to manual design for graphically oriented programs. For one thing, most graphics are horizontally dimensioned; for another, multiple column work, as in the tutorials, is much more easily accomplished on horizontal pages.

The manual was written in a variety of editors (including the ST-Talk Pro editor) and imported into Publishing Partner. Depending on the printing, it was either run off on an NEC LC-890 and then offset printed; or was printed to Postscript Files and run off on a Linotron L100 and then offset printed. The primary typeface used is Bookman with Helvetica and Helvetica Narrow for box inserts. Graphics were snapshot into Degas Elite then imported into Publishing Partner.

ST-Talk Pro was not a team effort. The company's President, Marketing Director, Layout Artist and only fulltime Programmer wrote this program, this being his chief task over two years. Many of us were on the periphery, feeding him our pet ideas, praising and attacking his. Most of the time he took it in good humor.

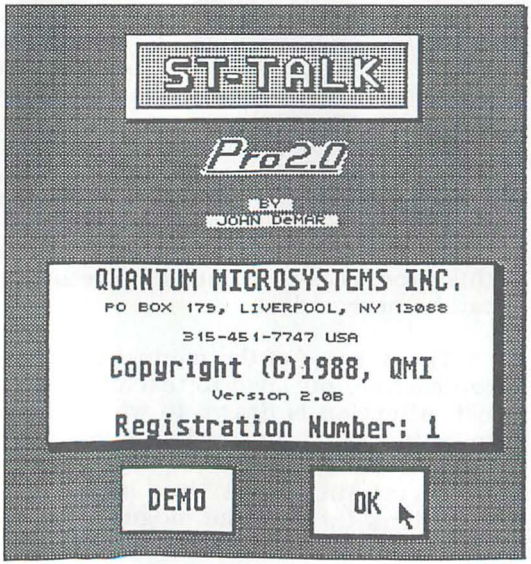
We want feedback, on the program and the manual. Reach us on GEnie (GMI), Compuserve (76004,1601), GMI BBS (315-457-7216).

HJF

Registering Your Disk

We want you to ***Register your disk***, and we will definitely make it worth your while to do so...

- ***Registered owners receive the Background Downloader***, for the paltry sum of $3 ($2 if you send us your distribution disk).
- ***You will be notified of updates***, and be given an opportunity to have the latest features available, for similarly paltry sums.
- ***You will be eligible for support*** (see *Getting Help*, below).
- ***One out of every 10,000 owners will be selected to win a prize of $1,000*** (void where prohibited or regulated). The drawing will be held within 10 days of the 10,000th program being sold, and every 10,000 after that. Names will be selected from the registered owners database by random number generation, and all selections will be final and at the sole discretion of QMI. QMI employees, contract employees, board members, stockholders, and all relatives thereof are ineligible.



Installing ST-Talk Pro

To use ***ST-Talk Pro***, there are certain steps you must take, and others which are adviseable. These are listed below. If you don't understand what is meant by these steps, then ***this manual's for you.***

1) Back up your disk: if you are in doubt as to how, use the full-disk copier supplied with your distribution disk.

2) Hook up your modem as per its instructions, and turn it on.

3) (Optional) If you are using a Hard Drive, make a folder on the partition where you are installing it, and copy the ST-Talk Pro disk to that folder.

4) Run ST-Talk Pro from the directory where you plan to use it.

5) If you use pulse dialing on your phone, or if you use a non-Hayes Compatible modem, you will need to set your Dial Options in the Terminal Mode (where you are when you boot the computer) to reflect these facts. For pulse, change ATDT to ATDP. For more information, see the Dial Options and Load & Save Options sections of the manual.

You can now run ST-Talk, if you don't mind giving up the fancier functions, such as AutoDialing, AutoPilot scripts, and archiving. For Hayes-compatible modems type **AT** followed by **Return**, and you should see an OK appear. The following steps are the ones you will ordinarily want to take fairly soon after proving to yourself that the program actually does work.

6) Set Paths in the File Menu: instructions appear in the Set Path section of the manual. This step may include getting a copy of the archiving program you intend to use, and installing it in a convenient place where ST-Talk Pro can reach it while running. See the Archiving section of the manual for more information.

7) Install the AutoDial Directory: see the AutoDial section of the manual and the Installing AutoDial tutorial, in the Tutorials section.

8) Set all the rest of the options from the Select Menu items, and save them (see Load & Save Options).

The rest of this manual exists for those of you who are, to some degree, confused by the list of steps above.

Getting Help

We would like to be all things to all people and give you all the help you would like. However, since we decided not to price the program at $199.95, we had to cut back a little. Being a telecomm user, you'll have access to quite a bit of help from other users. So, here is how you can get help:

1. If you can't even get your computer to dial anywhere, call our office at 315-451-7747.

a) We will ask you "What is your name, address, telephone number, and Registration number." If you are not prepared to give them to us at the time you call, or have not sent in your registration in time for us to have received it (the Post Office says to allow 5 days from the West Coast), we will ask you to call back when you are ready.

b) We will ask if you have used EMULATOR.ACC (which came with your computer) with your modem to see that they are working correctly together. We cannot do this for you, sorry. If you haven't, we will ask that you do so and then call us back.

c) We will ask if you have backed up ST-Talk Pro, so that you can boot the program using the distribution disk. If you haven't, we will ask that you do so and then call us back.

d) If *b) and c)* are all set, we will ask that you insert the copy of the distribution disk into Drive A on your computer, and boot the program, with your modem connected to your computer. If the program works at this point, you will get support online, through QMI BBS or the QMI areas on GEnie and Compuserve. *WE WILL PROVIDE TELEPHONE SUPPORT ONLY TO THE POINT OF GETTING YOU ONLINE. AFTER THAT, ALL SUPPORT WILL BE DONE ONLINE.*

We are ordinarily very helpful people. But since we envision this becoming the most popular communications program around, and since we're selling it for peanuts, we have taken a collective oath to be firm in this one matter.

2. If you can get your computer to call out, call QMI BBS at 315-457-7216, and go to the ST-Talk Professional Message Base. From there, you can select those messages which apply to your problem, and see if the answer is already there. Remember to Capture the messages into a buffer, so you can read and save them.

You can also look in the Atari Vendor's Forum (ATARIVEN) of Compuserve and the Atari ST RoundTable's telecommuncations section of GEnie for help. Pretty much the same information will be found in each place, although the QMI BBS will be the most current.

What's in the Manual

This manual is organized into 7 parts following this section.

1) *The Terminal Menus.* The Terminal is your means of interacting with other computers through your modem (or by direct wiring, for example when transferring files between dissimilar computers). You type text and it appears on the other computer, and the other way around.

2) *The Editor Menus.* The Editor is a full-featured text editor, with many features not found on other editors. The difference between an editor program and a word processor is that a word processor has features more suited to writing letters and reports, while an editor is more suited to writing programs. As a matter of fact, though, most of this manual was written in the ST-Talk Pro Editor, before being imported into Publishing Partner for the final layout.

3) *Tutorial* Section. Actually, there are mini-tutorials scattered throughout the manual. The tutorials are step-by-step "do it this way" examples, intended to help you learn by doing.

4) *Command Lists* contains tables of alternate key commands for the Terminal and the Editor, and a list of commands for AutoPilot.

5) *Appendices.* Included are various documents peripherally related to ST-Talk Pro, but handy to have nonetheless. The Beginner's Checklist is a good place to start if you are unsure of yourself around the ST.

6) *Glossary of Terms.* We refuse to be held to task for any of the offered definitions. We want to give the beginner some practical information, and haven't attempted technical precision.

7) *Index.* Yes, there really is an index. Is it complete? Is the Earth truly round?

Instructions to Users

How you use this manual depends on your prior level of experience with computers, with the ST, and with telecommunications. We suggest three different approaches, depending on your level of experience.

• ***New Computer Users***

You face a triple challenge: using the computer, using telecommunications, and using ST-Talk Pro. You'll make things a lot easier on yourself if you break the task down. In the Appendices section of this manual is a Beginner's Checklist, which you can use to check yourself out. Pass this checklist, and you'll graduate to the next category, directly below.

• ***New Telecommunications Users***

You face a double challenge: using telecommunications and using ST-Talk Pro. Exposure from many directions is what teaches best, so immerse yourself. Most of all, allow yourself to not know things. When you are reading the manual the first time, there will be many Terms you don't know. Read the entire page, even though you don't know what the some of the words mean, and thus are totally lost for the time being. The Terms section at the beginning of each part of the manual will reassure you that these terms are, in fact, in the glossary. Look them up after you have read the section, and then go back and read it again.

You are bound to run into situations where you don't know what's going wrong: is it the computer, the modem, the program, your use of the program, the phoneline, or the other computer which is at fault?

With experience, you will be able to hear your modem connect (assuming it has a speaker) and know whether the other computer hung up, wasn't hooked to the computer, or didn't "kick in" at your baud rate. You will be able to distinguish between the garbage that prints on your screen when the phone line stinks, and the garbage that appears when you have your baud rate set incorrectly. You'll also know what you can, and can't, do about these things. This only comes with experience. Don't be afraid to ask for help, through your local user's group, or through the use of telecommunications. For more information, see the Getting Help section of this chapter.

• ***"I Don't Need To Read Manuals"***

So what are your reading this for?

How to Use the Manual

Each Chapter in the manual has a ***Terms box***. These are words used in the Chapter which might be confusing if not understood, and which are technical in nature and therefore likely to be understood only by those with some experience. Words in the Terms lists are in the ***Glossary***. When you are puzzled by some term, look in the list for reassurance. You might find a word in the list in one chapter and not in another. The reasons for this might be a) our mistake or b) the word is peripheral to the understanding of the chapter.

Many of the commands in the manual can be accomplished through keystroke combinations. A computer has two extra Shift keys: the ***Alternate key*** and the ***Control key***. Each functions just like a shift key in that you hold it down while pressing one of the other keys. The convention for depicting these keys, and the key which you are to press at the same time, are:

<A><char> -- Alternate key with <char> key
<C><char> -- Control key with <char> key
<S><char> -- Shift key with <char> key

For example, **<A>E**, the command which toggles between Terminal and Editor, means *"hold down the Alternate Key and press the E key"*. The letter **E** is displayed capitalized, but is typed *WITHOUT* holding down the shift key.

The program is primarily a mouse-driven program, though, so there have to be conventions for depicting that as well. Unless you are told otherwise, all clicks are single-clicks. Also unless told otherwise, all clicks are clicks with the Left Mouse Button. The terminology for depicting Left vs. Right Mouse buttons is:

<LM> -- Left Mouse Button click
<RM> -- Right Mouse Button click

Where the mouse is to click is indicated after a slash, directly connected to the mouse button designation:

<RM>Terminal Window

means to click the Right Mouse button anywhere in the Terminal Window. This performs the same action as **<A>E**.

Within the text, without further description you might see something like the following: *"...and you can then toggle the editor [<A>E or <RM>Window]."* The alternate keystrokes have been included, with the square brackets being a visual tipoff that this isn't just another parenthetical remark from the manual writer who is attempting to make this into a treatise on the philosophical conduct of telecommunications as it relates to the later works of Freud.

The Terminal Screen: Overview

The ***Terminal Screen*** contains much information worth noting, some of it obvious such as the menubar at the top of the screen, and some of it not, such as the 4 VT-100 LED indicators on the bottom righthand corner of the Status Line.

The Screen is organized into 4 main parts:

1) the ***Menubar*** at the top.
2) the ***Terminal Window*** occupying the main part of the screen.
3) the ***Icons*** to the right of the Window.
4) the ***Status Line*** at the bottom of the Window.

Terminal Menubar

The ***Menubar*** controls the following general functions:

- ***File functions*** revolving around disk access.
- ***Text functions*** using the 10 text buffers;
  -- a buffer is just a place to hold text within your program.
  --there are 10 text buffers, also called editor buffers.
  -- the buffers are used for capturing, editing, and in general manipulating text.
- ***Dial functions*** involving use of the AutoDial Directory database.
- ***Answer functions*** associated with use of automatic call answering and online database functions useful for creating your own BBS.
- ***Select functions*** used to select your desired options.
- ***Print functions*** using the printer.
- ***Help functions*** providing assistance while in the Terminal.

Of Mice and Modems

When you drop a menu with the mouse, *The Operating System* (TOS) interrupts the flow of characters in and out of the modem. This could be a significant problem if the host computer didn't know to hold things up while you were up in the menu: you might lose information. To take care of this little matter, ST-Talk Pro sends a signal ***(XOFF)*** to the host computer when the mouse is in the menu area. The "start again" ***(XON)*** signal is sent when the menu function is done and ST-Talk is ready to receive once again. Now to confuse you a little: all the above is only true if you have selected XON/XOFF in the RS-232 Options of the Terminal Select Menu. There is rarely a reason for you not to select XON/XOFF, so if in doubt go ahead. It probably can't hurt.

Terminal Window

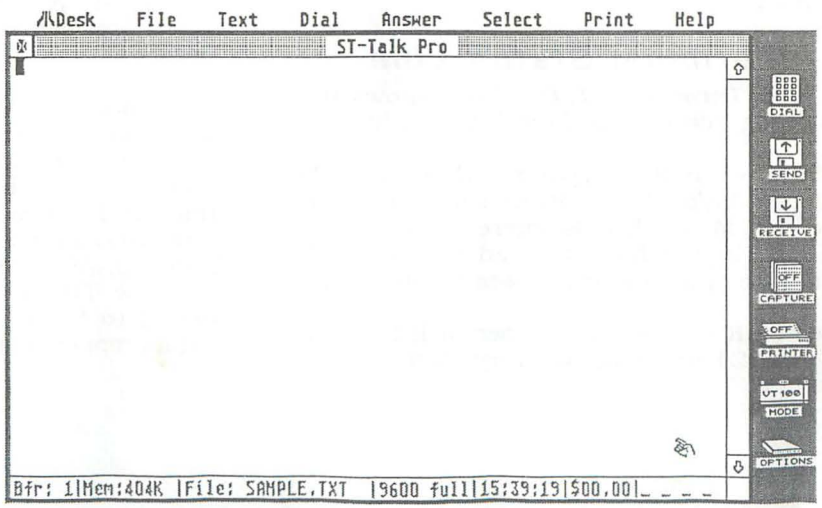
The ***Terminal Window*** contains a *Quit button* on the upper left; a *title bar*, *scroll bars and buttons* to the right; and a *text area* where input and output are displayed.

- ***Quit Button*** -- exits ST-Talk Pro, first giving you a double-check.
- ***Title Bar*** -- comes up titled ST-Talk Pro, but provides much more relevant information when dialing, using AutoPilot (the ST-Talk programming language) programs, or when connected online.
- ***Scroll Bar and Buttons*** -- The grey area normally above the Scroll Bar to the right of the Window, and the up-arrow above it, provide the same function: they show you the one screen of the Terminal text screen

The Terminal Screen: Overview

which immediately preceded what you are seeing. In other words, if you find yourself saying "darn, I missed that information," you can click on the grey area or the up-arrow and see what you missed.

Note that the arrow and grey area are "rubber-banded": you have to hold the mouse button down to keep the shadow screen displayed, and when you let go the main screen snaps back. The size of the grey area gives a relative picture of how much material has passed by when Capture is ON but this is for general informational purposes only. You can print one or both of these screens by using the *Print Screen* function in the *Print menu*. If you want to be sure to be able to go back to material passing by on the screen, turn Capture ON (you can use *Capture Text* on the *Text Menu* or click on the *Capture Icon*).



Terminal Icons

The ***7 Icons*** to the right of the Terminal Window allow quick access to certain menu items which are likely to be of ongoing usefulness during modem sessions. From the top these Icons are:

DIAL -- brings up the ***AutoDial Directory***, as if you had clicked on Directory from the Dial Menu.

SEND -- brings up the "Select A File To ***Send*** Dialog", as if you had input **<A>S** or clicked on Send File... from the File Menu.

RECEIVE -- brings up the "Select A File To ***Receive*** Dialog", also from the File Menu; the same as **<A>R**.

CAPTURE -- toggles *Capture Text ON/OFF*. The Function Key Macros which come with your program disk contain a macro so that F1 will also toggle Capture Text ON/OFF, just like the first ST-Talk program. You can also select this from the Text Menu, where a check-mark appears if Capture is ON. Notice that you tell whether Capture is ON or OFF by reading the inside of the Icon.

The Terminal Screen: Overview

PRINTER -- toggles the *Printer ON/OFF*, the same as ***<A>P***. Whatever text comes in the modem is sent out to the printer. ON and OFF appear inside the *Printer Icon.*

MODE -- refers to the *Terminal Mode* type: TTY, VT-52, VT-100, VT-220, or OTHER. This is selectable also from the Terminal Mode item on the Terminal Mode Select Menu; or by ***<A>M***. The Mode selected appears within the Icon.

OPTIONS -- refers to the RS-232 Options Dialog, which also appears on the Terminal Select Menu as the RS-232 Options item. Note that Baud Rate [<A>B] and Duplex Toggle [<A>D] can be set directly, without entering this Dialog. Furthermore, Linefeed Toggle [<A>L] can also be set directly. These are the settings most likely to change as you switch from one host computer to another.

Terminal Status Line

The ***Terminal Status Line*** shows the following information, from left to right:

Bfr: n -- *n* is the ***Buffer number*** currently selected through the Select Buffer item on the Text Menu. This is where captured text will go if you have turned Capture ON (check the Capture Icon to see if you have).

Mem: nK -- *n* is the number of K bytes (a K is 1024 bytes of memory) left for the buffers.

File -- the name of the file currently being edited in the *currently selected Text buffer.* ***The Text buffer*** is the one into which captured text is deposited: you set it from ***the Select Buffer*** item on the Text Menu. The Editor buffer is the buffer currently being edited: you set it by clicking on the Icon representing the buffer, or through pressing the corresponding Function Key while in Editor. They could be the same buffer number, or be different ones.

Baud Rate/Duplex -- the current Baud rate and duplex state (half or full) are displayed in the middle section of the Status Line. Baud Rate can be toggled through the possibilities by <A>B while Duplex toggles with <A>D.

Time -- is displayed in 24-hour format. If you have GMI's *DeskCart* or another clock in your ST, you won't have to set the time. If not, you can set it through the Clock & Timer item on the Terminal Select Menu.

$ -- represents the *amount of money* you have spent in the current call: this is handy when you are connected to an online service which charges by the hour. You set the amount for the service in the AutoDial Directory, found in the Dial Menu in the Terminal. Also, you can set an alarm in the Clock & Timer dialog (Terminal Select Menu) to be notified when you reach a certain money limit.

List & View Command

File
List & View...
Send File...
Receive File...
Archive
Un-Archive
View Archive
Set Paths
Utilities
Command Shell
Run a Program
Quit ST-Talk!

List & View

The ***List & View*** facility does double duty: it allows you to view a text file and also to inspect the directories currently available to your system. You could view the files in the Editor, of course, but List & View is sometimes more convenient when you just want to check what's in a file, or whether a file you downloaded was saved correctly.

What To Expect

Initiating List & View will put you in the *QMI Fileselector*, which you can use to view directories (in which case use CANCEL to exit) or select the file you want to view.

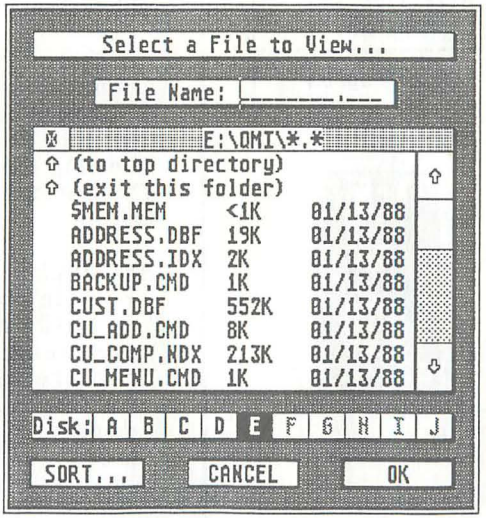
In the ordinary course of events, the List & View facility is for captured files you download from a BBS, or for files you are using in programming. These are called 'text' or sometimes called 'plain ASCII' files, which you don't really have to know about, other than that there are such things.

How It Works

When you have selected a file for viewing, it will be shown in the Terminal window, after that window has been temporarily cleared. (Not to worry: it will be redisplayed when you are through.) One window's worth at a time is displayed, at which time you will be prompted, in the Status Line at the bottom of the window, to touch any key to continue. The Left Mouse Button will also continue the display. To quit before the file is finished, touch the escape key **<ESC>**, or the Right Mouse Button.

Quick Keys

<A>Q	List & View
LM	Continue Display
RM	Quit Display



Terms

<LM>
<RM>
<ESC> Key
ASCII
BBS
Directory
Left Mouse Button
QMI Fileselector
Right Mouse Button
Text File

Send & Receive Files

Terms

ASCII
Accessory
BBS
Baud Rate
Dialog
Information Network
Path
Protocol
QMI Fileselector
Text Upload

What Send/Receive Are About

Sending and Receiving files is what you will do when you ***Download*** (Receive) or ***Upload*** (Send) a file from or to a Bulletin Board System (BBS), one of the information networks (e.g., GEnie and Compuserve), or from another user. How the file is sent is called the Protocol. If it is just sent without any extra checks for accuracy of the transmission, that is called "straight upload", Ascii upload, or Text Upload.

There are various ways of checking the accuracy of the transmission. Selecting Send or Receive brings up a special version of the QMI Fileselector which contains a means of selecting the transmission protocol desired. The buttons, and their significance, are as follows:

ASCII: plain transmission without checking. You are doing an *ASCII Upload* when you do Text Upload from the Text menu. You are doing an Ascii download when you capture to a buffer and then save the buffer: not quite as easy as doing it directly to the file, which is what happens here.

XMODEM: the most used method; almost everyone has it available.

XMODEM CRC: an improvement in accuracy over XMODEM: use this when ever it's available.

YMODEM: a little faster than XMODEM, providing you have a nice clean telephone line. This is the same as what some services call YMODEM CRC.

Quick Keys

<A>S or SEND Icon	Send File
<A>R or RECEIVE Icon	Receive File

FMODEM: a little faster still, but it requires VERY clean telephone lines, as an error will require a lot of retransmission (it only checks after quite a bit of material has been sent), and is generally used with higher baud rates for that reason.

CIS-QB: Compuserve's Quick-B protocol; in which you find the name of the file you want to download, signal the download (DOW), and then select the Quick B protocol. You will then be prompted for the name of the file. At that point, go into the "Enter file name for Receive" dialog and pick the path and filename you want, select CIS-QB, and click on START. The trick of CIS-QB is that it takes the path name, as well as the file name. CompuServe then instructs your computer where to save the file on your system.

KERMIT: a protocol used largely by universities and larger computers; you must have KERMIT.TTP loaded on disk, and have the Path set through the File\Set Path... command. NOTE:If KERMIT doesn't show up normally on your Protocol Dialog, that means it either isn't on the disk, or the Path is not set correctly.

Send and Receive Files

Batch Mode

The ***Batch Mode*** Dialog works only with YMODEM and FMODEM: it asks you to select between normal, one file at a time upload or download, and Batch Mode, where you can upload or download multiple files. Note that if you select Batch download, there is no need to enter the names of the files to be received, only those to be sent.

Background Transfers

The ***Background*** Dialog asks whether you want to transfer files in the Background, i.e., while you use the computer for some other task. This button will be disabled (shaded) unless you have loaded the Background Accessory when booting your computer.

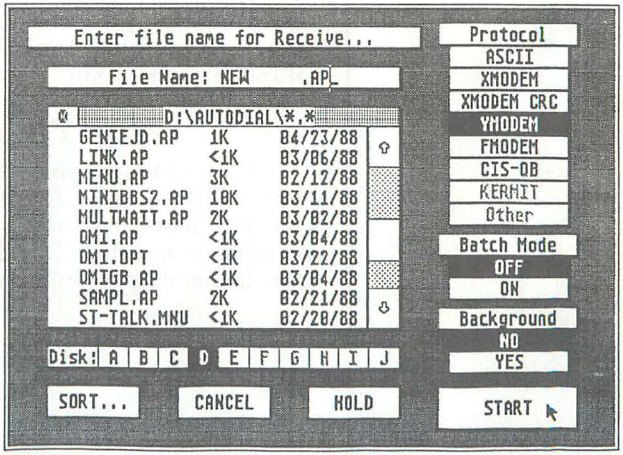
TO RECEIVE THE ACCESSORY NECESSARY FOR BACKGROUND SEND & RECEIVE, YOU MUST MAIL IN YOUR ST-TALK PROFESSIONAL REGISTRATION CARD and (alas) include $3 for postage and handling ($2 if you send us your distribution disk).

For directions on installing and understanding the features of the *Background Accessory*, refer to the instructions that come with it. In general, all you really have to know is that when you click on the Background button, you can still use the editor or even run another program from within ST- Talk Professional, while the send or receive takes place.

Hold and Start Buttons

The ***HOLD button*** lets you load the *QMI Fileselector* with the path and file names you want to use, select the protocol and protocol options you want, and then return to the Terminal or the Editor. When you want to start the upload or download, issue the Send *[<A>S, <LM>Send Icon]* or the Receive *[<A>R, <LM>Receive Icon]*, and click on ***START*** *(or <Return>).*

The ***START Button*** does exactly what it says. You can also use <Return> to Start. If you change your mind and don't want to START after all, choose the *QMI Fileselector* ***CANCEL*** Button.



Send and Receive Files

How To Send/Receive Files

The Send and Receive Dialogs are identical, except for the identifying label on the top of the Dialog. The Dialog incorporates the QMI Fileselector, and is used in the usual manner, substituting START for OK.

Select your Protocol, Batch Mode setting, and Background setting. Then, unless you have selected Batch Mode when downloading, you will need to pick your file(s). For Batch Upload, you will use the Multiple Select feature of the QMI Fileselector: click on as many files as you like, within a single directory. When downloading a single file, you will probably have to type in the name, unless you are planning to write over an already existing file. For Batch downloading, you won't need to type in any file names: the Batch downloading protocol will take care of them for you, leaving you only to select the directory where you want them placed.

Not To Panic

So, you began your Send or Receive, and you realize that something or other is wrong. Not to worry: type <C>X (^X in computer notation), and that will interrupt the transmission on most systems.

What Can Go Wrong

1) You can take too long to get set up, and be "timed out": the other computer might give up on you. This is especially so when you are uploading. Use the HOLD button, so that you can initiate the upload immediately on being told to go ahead.

2) You can pick the wrong protocol: in which case the computer will give up on you. Try, try again.

3) You can have too little space on your disk for the download (USE THE DISK UTILITIES\STATUS OPTION BEFORE YOU RECEIVE IN ORDER TO PREVENT THIS PROBLEM): this might show up as a download which was "successful" but which doesn't show up on your disk.

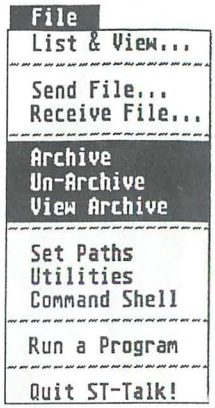
4) The download is complete, you hear a bell ring, but nothing is happening on your screen: HIT RETURN when you hear a bell at the end of the transmission. Do not ask for whom the bell tolls, it tolls for thee!

Don't forget to register your serial number by returning your Registration Card enclosed with ST-Talk Pro.

To receive the Background Downloading Accessory, return your Registration card with $3 or $2 if you include a diskette. You will receive the first update to ST-Talk Pro, the backgound downloader, online support for ST-Talk Pro, and a FREE subscription to the QMI Connection newsletter.

Use this page to hold the documentation after you send in for the Backgound Downloading Accessory.

Archiving Functions



Terms

ARC.TTP
Buffer
Directory
Path
QMI Fileselector
Ramdisk
Suffix
TOS

Explanation

An Archive is a way of 1) making files smaller for transmitting and storing, using what are called "compression" techniques and 2) putting one or more files together into a single file, also for ease of transmission. A file with an .ARC suffix can usually be "de-ARCed" by programs on any computer (although programs in the Archive will likely run only on one particular machine).

Archive

Clicking on Archive will bring up the QMI Fileselector, asking you first for the name of the Archive, and then asking you for the names of the files you want to add to the Archive.

Un-Archive

Clicking on Un-Archive will allow you to "Un-Arc" the files in an Archive. You will be asked into what path you want to place the files in the Archive.

View Archive

This allows you to list the files in an Archive, so you can decide whether you want to un-Arc it or not.

Installing ARC.TTP

ARC programs have evolved over time, and will continue to do so. Rather than have you stuck with an outdated archiving program, ST-Talk Pro allows you to use the most current ARC program which uses commands consistent with ARC.TTP, just as though it were built-in to the program.

To install ARC.TTP, you must first obtain a copy of the program, which you can find on almost any BBS or any of the information services. Place it in a convenient directory, and inform ST-Talk Pro through the Set Paths command of the File Menu.

Single drive users may want to install ARC.TTP in a ramdisk, so that it will be available when using Archiving functions on various disks. Ramdisk loaders which will load ARC.TTP into the ramdisk when booting are available in the public domain.

When It Doesn't Work

If you attempt to perform an Archiving function and nothing happens, the probably culprit is lack of memory. You might get an error message, or see two bombs, or on a color system might even see color bleeding through, just before you are dumped back into ST-Talk.

The reason for these unpleasant events is that the archiving program you are using (probably the ARC.TTP program) takes room to run in your computer. Depending on how much memory you have allocated for your buffers, you may or may not have room to run it. ST-Talk Pro attempts to always leave room for you, but The Operating System is a flawed creation, and sometimes lies about how much room is actually left. So, if you have attempted an Archiving function and it doesn't work, you might try Re-initializing the Editor buffers through the Editor Mode Options menu item by that name, and give some memory back to the system. Read the directions on how to do that in the Editor section of the manual, under the Options menu.

Archiving Instructions

How To Archive

1) To Archive one file or a number of files, click on the ***ARCHIVE*** option from the ***FILE*** menu.

2) From there you will be shown the QMI Fileselector, and asked to input the name of the Archive. It's a good idea to use a .ARC suffix for the file, in order to keep things straight.

3) Next you will be asked to select the files to be included in the Archive, again using the QMI Fileselector. An important difference of the QMI Fileselector is that you can select more than one file at a time. DO NOT DOUBLE-CLICK OR SELECT OK until you have finished single-clicking on all the files you want to have included in the Archive. (On the TOS Fileselector, you would have to double-click or OK each file: isn't this easier?)

• NOTE that you can only work within one Directory at a time. However, as you can "add" to that archive by selecting ARCHIVE once again, specifying the self-same name you just used, and switching to the additional Directory on which files are located.

• Additional hint: on a floppy, there is an awful lot of disk access due to the need to write out intermediate files. So, if possible, create the ARC'd file to a ramdisk. If that's not possible, save the largest files to add until last (because once they are added, things will slow down considerably).

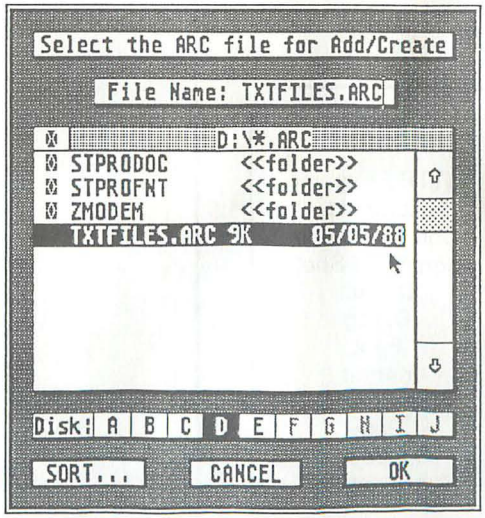
4) When you have finished selecting all the files, double-click on the last name, or click on OK, and away we go ("sure, Ralph"). Well, sort of: you have to touch a key between files (this was a tradeoff -- we wanted you to see any error messages which came up).

Un-Archiving

UnArchiving is even easier: select the .ARC file you want to Un-Archive and click on OK. In the second dialog, select the path where you want to place the files from the Archive, and you'll be done.

Viewing an Archive

We've saved the easiest for last: double-click on the file you want to get information on, and that's it.



Terms

Directory
Double-click
QMI Fileselector
Suffix

Set Paths

Terms

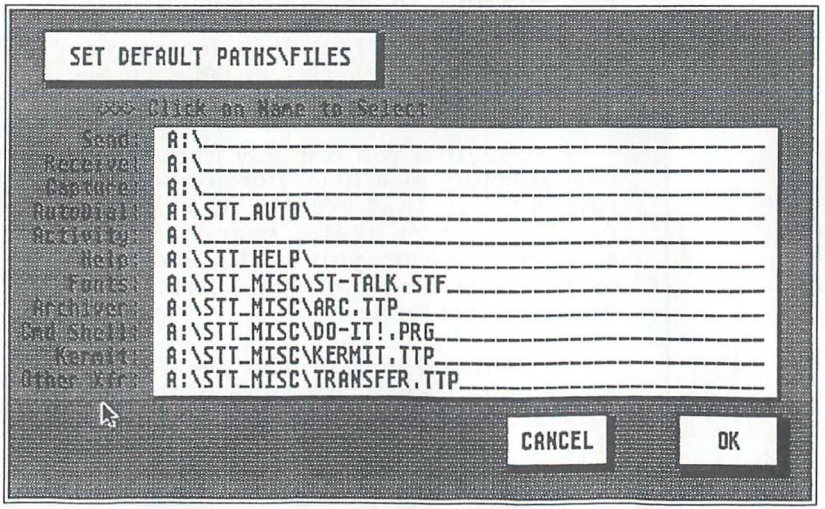
.TTP Program
AutoPilot
Command Line
Command Shell
Default
Dialog
Font
Kermit
Main Directory
Path
Snapshot
Sub-directory

What is a Path?

A Path is the trip from the main directory on the drive, through the folders (also called sub-directories), to where the file of interest resides. It's like being given directions to someone's house by being told to "start from the supermarket, take your second left on Main St., and then your third right on 2nd Avenue."

Selecting Paths & Filenames

ST-Talk Professional has a variety of paths which need to be set, because of the many features it supports. There are also certain file names it needs. All of these are described on the page to the right, referring to the snapshot of *SET DEFAULT PATHS\FILES* dialog below. This dialog is a smart one: ***when you click on the name of the item, the GMI Fileselector appears,*** and you can then select the default path or file required. Note that for certain defaults, only a path is required; for others, a filename is also required. If you try to put a filename where only a path is required, you will be ignored (but don't take it personally).



Set Paths

Path Definitions

Send: (Path) where to start looking for files to send or upload, using the QMI Fileselector.

Receive: (Path) same as Send, but the other way.

Capture: (Path) where to start the QMI Fileselector for saving files.

AutoDial: (Path) where ST-Talk Professional should look for the file containing dialing information: DIAL.IDX, DIAL.DBF, and AutoPilot (.AP) files.

Activity: (Path/Filename) where and what name for your Activity Log (see the Dial menu for what's included in this file).

Help: (Path) where your Help (.HLP) files are stored, to be used when you click on the Help Menus.

Fonts: (Path/Filename) what font file to use with ST-Talk Professional -- ordinarily STT2.STF, unless you know a bit about fonts.

Archiver: (Path/Filename) where ST-Talk Professional can expect to find ARC.TTP, or whatever program you use for Archiving functions. ARC.TTP is actually a public domain program, which ST-Talk Pro runs for you.

Cmd Shell: (Path/Filename) where the Command Shell, which allows you to run programs from a Command Line, just like the older computers (IBM's for example) do. The default is DO-IT!.PRG, QMI's rather good one.

Kermit: (Path) where to find KERMIT.TTP or equivalent, the program which enables Kermit transfers. KERMIT.TTP is another public domain program which ST- Talk Professional runs for you.

Other Xfer: (Path/Filename) who knows what the next method of file transfer will be? When it comes along in the form of a .TTP program (that's TOS Takes Parameters), put its name and path here. When you click on OTHER in the SEND and RECEIVE DIALOGs, this program will be started for you.

Disk Utilities

File
List & View...
Send File...
Receive File...
Archive
Un-Archive
View Archive
Set Paths
Utilities
Command Shell
Run a Program
Quit ST-Talk!

Terms

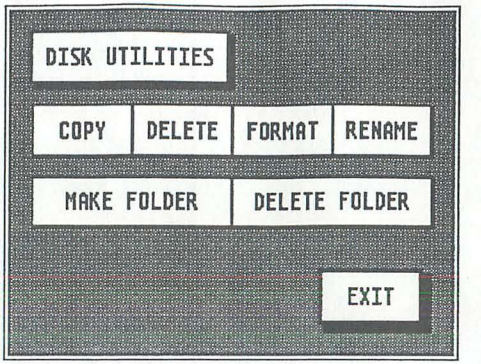
Accessory
Darken
Directory
Folder
Highlight
QMI Fileselector
Sub-directory
Wildcard

Disk Utilities on the File Menu allow you to arrange disk files without having to leave ST-Talk Professional, even if you don't have QMI's *DeskCart*, with its 14 accessories right at your fingertips. All the utilities use the QMI Fileselector as the means for selecting files and paths. The utilities have a few special features worth noting:

COPY allows you to select a file through the QMI Fileselector and move it anywhere on your system. If you select more than one file, by darkening more than one name within the same directory, you will be prompted only for the Path, the assumption being that you want to use the same names but move them to another directory. Moving to another directory clears all the highlighted names. You can also select files using "wildcards", the result being the same as if you had darkened a number of files. Wildcards are used exactly like the TOS fileselector you know from other programs: *1)* suffix and prefix are treated separately; *2)* * stands for any combination of characters from that position in the field to the end of the field; and 3) **?** stands for any character in that exact position.

DELETE allows you to delete any number of files within a given directory, by highlighting the ones you want to delete and then clicking OK. Wildcards work here, too.

FORMAT allows you to initialize a diskette for either single- or double-sided microfloppy drives. Be careful: all files on the diskette will be erased!



RENAME allows you to change the name of a file.

MAKE FOLDER allows you to make a new Folder, or Sub-Directory if you will, within which to store other files or folders.

DELETE FOLDER deletes the folder and everything contained within it, both files and other folders. Select the folder (click on its name in the QMI FileSelector) then click on OK. You are given a second chance before the deleting begins but be sure you know what is inside the folder (or folders) before you proceed.

Delete Folder can be used to completely erase all of the files on a disk by selecting the main (root) directory of the disk. *Be Careful!*

Command Shell

A ***Command Shell*** is a program which allows you to control the computer from what is called a Command Line. This is a throwback to the days when all computers operated in that manner. It has certain advantages in speed or ease of getting things done, once you know what you are doing. The mouse-driven desktop is much, much easier for the beginner to use, and some of us like it even though we know both methods.

QMI makes what we consider to be a truly superior Command Shell called *Do-It!*. Do-It! can run GEM programs, can be auto-booted from an Auto Folder, and can even auto-boot a GEM program, allowing you to set up your computer for custom, turnkey operation for the non-computer user. At the low retail price of $24.95, it is worth your while to explore its possibilities (besides, it will also prepare you for working with those older style computers like the PC).

You need to Set the Path for the Command Shell using the Set Path Command. If you are using *Do-It!*, you don't even need to insert the name of the shell you are using. If you are using another shell, supply the name in addition to the path.

Using a Command Shell is one of ST-Talk's typically complicated procedures: you click on it. When you exit the shell, you will be returned to ST-Talk.

If you are returned to ST-Talk without the Command Shell running, you will first be informed by an error message that:

```
DO-IT!  V1.10  © 1987 Action Computer Services, from Quantum Microsystems, Inc.

black   bye     cat     cd      chdir   click   cls     copy    date    del
desk    dir     dstat   ds      echo    erase   exit    free    hide    if
kbdelay kbrate  list    lock    ls      md      mem     mkdir   noclick noecho
nowrap  path    pause   print   prompt  rem     ren     rename  rm      rmdir
rd      space   time    type    unhide  unlock  ver     vol     wait    white
wrap

[11:13:58] C:\HELP>dir e*.hlp

Volume in drive C is not specified
Directory for C:\HELP\e*.hlp

EKEYS    HLP      3884  07-04-88  06:09pm
EDIT     HLP      1494  05-02-88  11:57pm
ESELECT  HLP      1834  05-02-88  11:57pm
EPRINT   HLP       438  05-02-88  11:57pm
    4 file(s)

[11:13:56] C:\HELP>chdir d:\st-talk2
```

a) the Set Path Command for the Command Shell has not been set correctly (check that first); or

b) there is not enough memory in the machine to accommodate both ST-Talk and the shell. See *Run A Program*, on the next page, for further explanation.

Terms

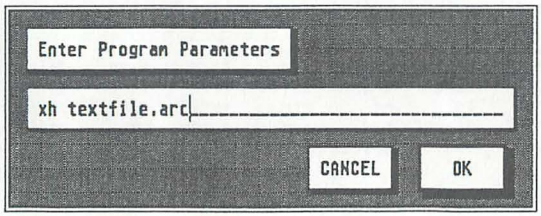
Command Line
Desktop
GEM
Turnkey

Run A Program

You can ***Run A Program*** from within ST-Talk Professional, subject to one *important limitation:* you must have enough memory to run both programs (ST-Talk Professional and the new one) at the same time. On a 1040ST or upgraded 520ST, you will probably be successful, depending on the number and size of accessories you have loaded.

The actual act of running a program is as simple as selecting it from the *QMI Fileselector*. The program can be any kind (TOS, TTP, or PRG) of program.

If you run a ***TTP program***, you will be prompted for the command line parameters. This type of program is usually a utility that needs a filename or an option sent into the progam when it runs.



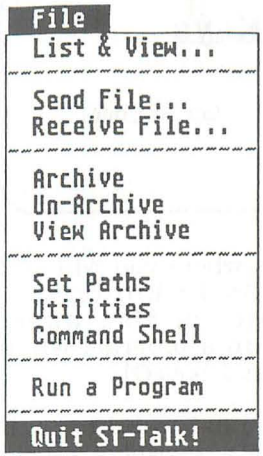
If you run into a problem running a program, you can ***Re-initialize the Editor*** buffers through the *Options* menu in the Editor: you may be able to give some memory back to the system, which will then give you enough memory to run your program. Remember, too, that you can ***Save Options*** in the Terminal Select menu, and thus have the program "pared down" from the start.

But... The Operating System (TOS) does not reliably "give back" memory which has been used for other purposes previously. Thus, you might have enough actual physical memory available, but TOS may not recognize that fact. In this instance, you will receive an error message telling you that something went wrong. Since you are clicking directly on the program in order to select it, there can't be much else wrong (except perhaps for a problem with your disk).

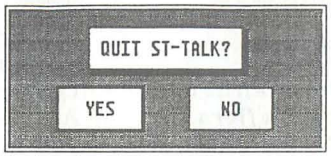
Terms

Accessory
Memory
QMI Fileselector
System
TOS

Quit Program



When you issue the ***Quit command***, you will be prompted as to whether you want to save any modified buffers, through the Save Modified Buffers Dialog. This Dialog, shown here, has a checkmark on each buffer, along with any filename given to that buffer.

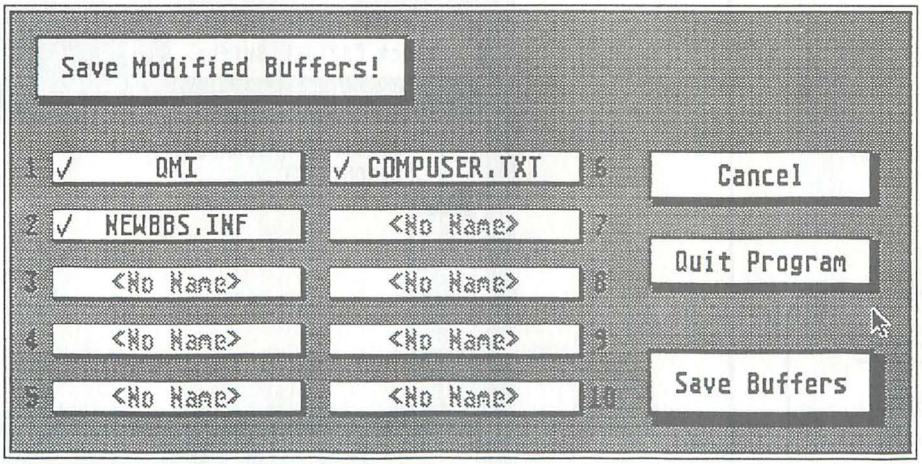


Quick Keys

<A>X or *<UNDO>* Quit

Saving Modified Buffers

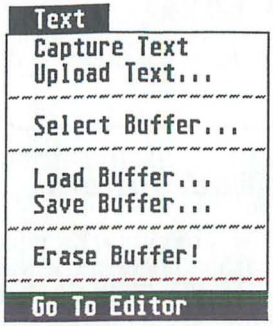
You can toggle the checkmarks with LMouse: any buffer with a checkmark will be saved, if you choose the Save Buffers button. If the buffer has a name, you will be prompted for Replace/Append/Cancel. If the buffer has not previously been named, you will be presented with the QMI Fileselector, in order to pick a name.



Terms

Buffer
Button
Dialog
<LM>
QMI Fileselector

Text Buffers



What is a Buffer?

A ***Buffer*** is a place where text is stored and, in this case, can be *Captured, Loaded, Saved, Ported, Uploaded, or Edited.* It's a temporary storage and work area. When you Capture text, it is stored in a Buffer. You can edit that same Buffer with the ST-Talk Pro Editor. You can run an AutoPilot program from a Buffer.

Using the Buffers

Reference is made in the manual to ***Terminal Buffers*** and ***Editor Buffers***. In fact, there are only 10 Buffers, each of which can be used for both purposes. However, there is a currently *'active'* Terminal Buffer, into which text is Captured; and there is a currently "*active*" Editor Buffer, which is where you will find yourself when you Go To Editor. The current Editor Buffer is also where AutoPilot will try to run a program when you issue that command [<A>G].

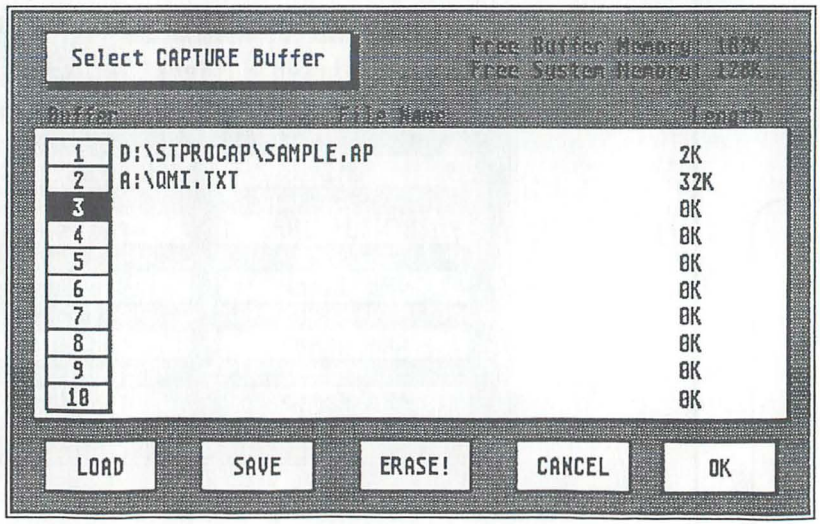
To move from Terminal to Editor and back, use ***<A>E*** or ***<RM>*** anywhere within the Terminal or Editor Window.

Quick Keys

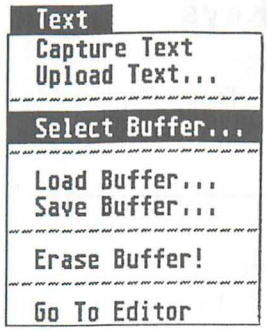
<A>E *or* ***<RM>Window***	Go To Editor

Terms

AutoPilot Window



Text Buffer Commands



Terms

ASCII
Buffer
Buttons
Control Code
Cursor
Dialog Highlighted
Memory
Status Line
Word Processing

The ***Buffer commands*** control the 10 Editor buffers. The Load, Save, and Erase commands refer to the currently selected buffer: the number of which is displayed in the leftmost box on the Status Line at the bottom of the screen.

Selecting a Buffer

Select Buffer allows access to all aspects of Buffer control, through use of the Select Editor Buffer dialog. This dialog offers all relevant information regarding buffer use, including the total amount of memory allocated to all buffers and that which is left over for system use (such as running a program from within ST-Talk Pro). The sizes and filenames (if any) associated with the buffers are listed. The number of the current buffer is highlighted.

- Select the buffer you want to affect by clicking on the buffer number,

- Choose your action from the buttons on the bottom of the Dialog.

Load Buffer

Load Buffer, whether chosen from the Text Menu or from the Select Editor Buffer dialog, asks whether you want to keep the current buffer or not. If you choose to keep it, the file loaded into the buffer is inserted at the cursor: this is how you would merge two files. In the Editor, the filename is displayed in the Window Title and the prefix name of the file (the 8 characters before the period) is displayed under the icon corresponding to the chosen buffer.

Surprise!

You will be in for a bit of a surprise if you load a Word Writer/First Word file: these word processing files use special characters AND they will display correctly. If you want to see these codes, turn ON Control Codes in the Editor Options menu before loading the file.

If you load any other kind of strange file, you will first be asked whether you want to display it. If you give the OK, you will see the file displayed, for what it's worth. Program files will cause all sorts of strange things to happen, since they contain all the possible ASCII values, being basically a bunch of numbers (which are quite meaningful to the computer, but not necessarily to us). Some of those characters are likely to cause the screen to clear, etc. No harm can come, so go ahead and give it a try.

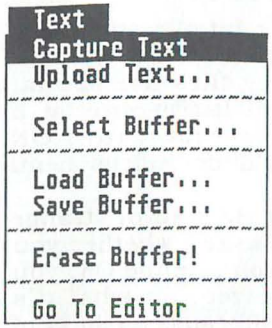
Save Buffer

Save Buffer, however chosen, will ask whether you want to Replace, Append, or Cancel, should you pick a filename which already exists in the given path.

Erase Buffer

Erase Buffer double-checks your intention. If you click on ERASE, everything in the current buffer is permanently deleted! Remember, choosing *Erase Buffer* from the Editor will erase the currently selected Edit buffer and doing so from the Terminal will erase the current Capture buffer. The buffer numbers are chosen independently through *Select Buffer* in the *Text* menu of each mode.

Capture Text



To ***Capture Text*** means to preserve the text which you see printing out on your screen as you receive it from another computer. This is different than File\Receive File..., where the information is captured directly to disk, without being seen on your screen.

Capturing Text is a convenient means for saving information which you can later read at your leisure. This can be a way of saving money, when you are connected to the for-pay services (e.g., GEnie or Compuserve), or being polite when you are connected to a free BBS.

To Start Capturing:

1) Click on the *CAPTURE icon* on the right of the ST-Talk Professional screen;

or 2) Drop the TEXT menu and click on *Capture Text*;

or 3) Press the *F1* function key (if you have the Macros which came with your program loaded in).

Doing any one of the three actions above will change the OFF on the CAPTURE icon to ON, letting you know the Capture status.

Quick Keys

<LM> on Capture Icon	Toggle Capture

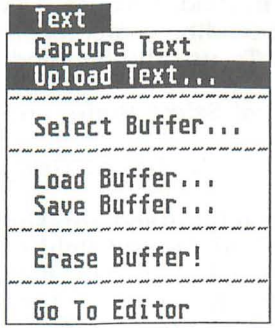
To Stop Capturing Text:

Reverse any one of the three actions listed above: Click on the CAPTURE icon, click on Capture Text... on the Text menu, or press the F1 function key. This is handy to use when you want to record certain parts of your transactions with the other computer, and disregard others. You might find that it is safer, however, to use the Capture Text option fulltime, and edit the sections you want to save in the ST-Talk Professional Editor. You can even do this while continuing to Capture Text.

Terms

Baud
Function Key
Icon
Macros

Upload Text



Terms

Break
CR
Dialog
Echo
FormAlert
Function Key
Offline
Online
Prompt
QMI Fileselector
Text Editor
Transfer
Word Processor

You might ***Upload Text*** when you have prepared a message offline (where you aren't paying and you can collect your thoughts) and want to send it online (where you are paying, and where editing your thoughts can be an expensive proposition). You might have prepared the message in the ST-Talk Professional Editor (see the Editor section), or in your own favorite word processor or text editor. If you are using First Word, Word Writer or ST-Writer, write it out as ASCII text before uploading it.

If you are sending to a local BBS, you won't need to do anything special: when the time comes where you would have typed in the message, use one of the two ways of starting a Upload Text transfer:

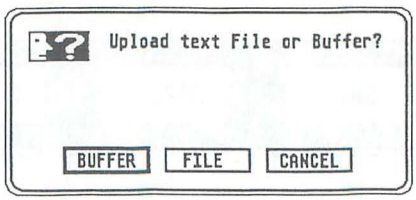
Starting An Upload

To start uploading a text file or buffer, either:

a) Click on ***Upload Text*** on the *Text menu*;

OR **b)** Press the **F2** Function key (if you used the STT2.FNK file which came with your program disk).

When you initiate a Text Upload you will be presented with a 3-choice FormAlert as shown below:



If you select ***BUFFER***, you will then be asked "which buffer," through the Select Text Buffer dialog. If you select ***FILE***, you will be presented with the QMI Fileselector, and from there will select the file you want to upload in this fashion. Remember: this is different than the ***Send File...*** option on the *File menu*, in that there is no error checking, and you will see the text flow across your screen as it is echoed back from the receiving computer (usually -- let's skip the unimportant exceptions).

Types of Text Uploads

When you are ***Uploading Text*** to one of the information services, you will ordinarily be in what they call an Editor. Their editors are limited because they are only devoting part-time to you--that's how they keep costs down. The result of this partial attention is that you may be sending text too quickly for them to keep up with you. When you see what is being echoed back to you, you may see only parts of your message. NOT TO PANIC...we've got an answer for just about everything. There are three solutions:

1) Some services, such as GEnie, have an option to upload text. In the GEnie editor, when you are on the first line of the message with the ***"1>"*** prompt, type ***"*U <cr>"*** and you will then be prompted with a message to send your text. When you are done, type the BREAK character, which you set in the User Options section of GEnie (***<C>B*** is a pretty standard choice, ***B*** standing for BREAK, an old teletype word meaning an actually break in electrical current used to signal from one teletype to another).

Upload Text

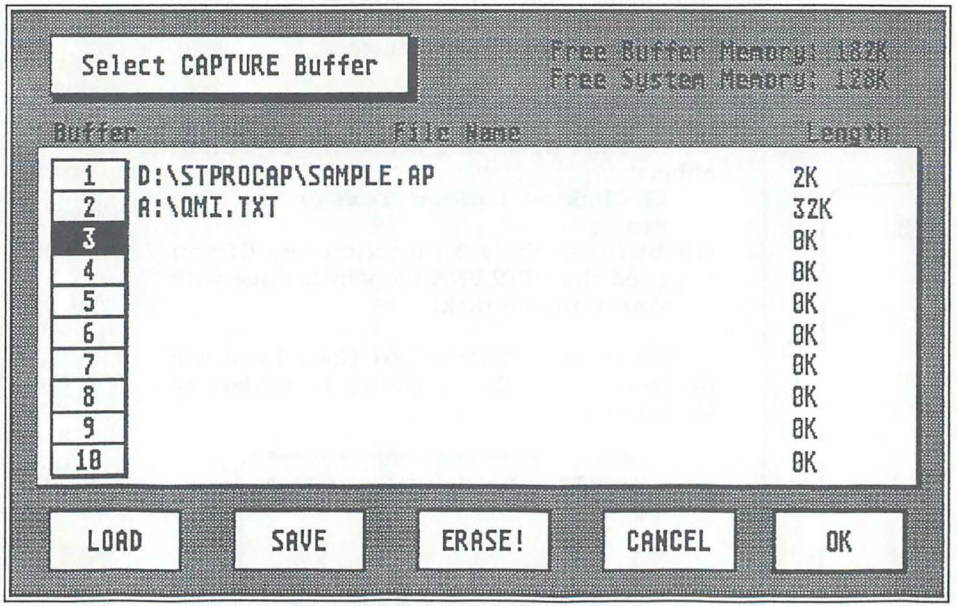
2) If the service does not have this capability, you can slow down the rate of Upload by clicking on ***Text Options*** in the *Terminal Select menu*, and choosing a slower ***CR Delay Rate***. This will introduce a pause after each Carriage Return (CR), letting them play catch up. See the Select\Option section in this manual if you want more information on the *CR Delay* option.

3) The most reliable method, because it is synchronized with the sending computer, is the ***PROMPT option***. To use this method, do the following:

a) Go to the *Terminal Select Menu*, and click on *Text Options*.

b) Click on PROMPT in the *Upload Using* field of the dialog.

c) Insert the character used for the prompt in the *Upload Prompt* field of the dialog. The prompt character may vary from system to system. GEnie uses a ">" character, for instance.



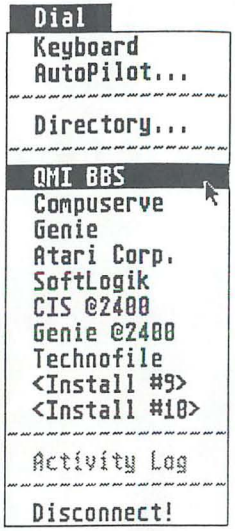
Do you know about ***QMI's DeskCart*** Accessory cartridge for the Atari ST?

DeskCart is a small cartridge that plugs into your ST's cartridge port and includes 64K of ROM and a battery-backed clock/calendar. With DeskCart installed, you get 20 added function built into one Desk Accessory including: *a Notebook, Calendar, Appointment book, Card File, Calculator, Typewriter, VT-52 Terminal, Keyboard Macros, Ramdisk, Print Spooler, Disk Utilities, Disk Formatter, Control Panel and Memory Tester.*

DeskCart sets your system date and time automatically each time you turn on your computer! The built-in battery keeps the time for up to 5 years, even if you remove DeskCart while using another cartridge.

DeskCart is only $99.95

The Dial Menu



Terms

<A>
AutoPilot
Baud Rate
Buffer
Command String
Database
Dialog
Dropdown Menu
Duplex
FormAlert
GEM
LMouse
self-modifying

The ***Dial Menu*** allows quite complicated actions to be easily programmed. Central to the Dial Menu is the AutoDial Directory, a database of telephone numbers and associated actions. Access to the AutoDial Directory can be gained through menu items installed by you, the user, in the dropdown Dial Menu. First, a brief description of the menu items, before we dig into the inner workings:

Keyboard allows you to enter a number which is to be dialed directly from the Terminal. The Keyboard Dial Dialog allows you to choose any of the 4 dialing prefixes, which are set in the Dialing Options Dialog in the Terminal Mode Select menu. This is handy if you are using a Long Distance service which requires multiple numbers; or are using a modem which requires complicated command strings, and don't want to bother typing them in from the Terminal.

Autopilot runs the Autopilot program in the currently active Editor buffer or from disk, depending on your choice in the FormAlert which appears. If you happen to run a buffer which doesn't have a program in it you will get an error message (probably on Line #1 of the buffer), and that's all.

Directory leads to the AutoDial Directory, which is where you store the numbers you want to call, and information which allows you to have the computer set itself automatically to the correct settings (such as baud rate, duplex, etc.) for that number.

Quick Keys

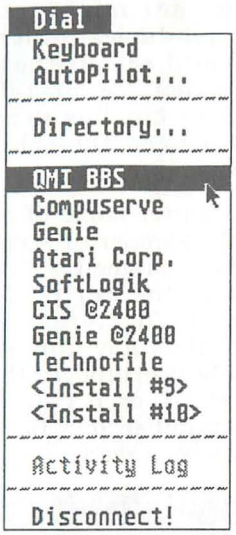
<A><LM> or ***<Install #>***	Install Number in Dial Menu

<Install #n> are the 10 self-modifying items: when they contain a Dialing Database item, clicking on one will run the instructions contained in the Dialing Database. When you do <A><LM> (hold the alternate key down, click with the Left Mouse button), you will be given a chance to choose an item from the dialing database to install on the item upon which you clicked. See the Tutorial on Installing The Dialing Database for a blow-by-blow account.

Activity Log is a way of recording major functions you do online associated with dialing. Each each item in the log is the name of an activity and an associated time and date. The log file is a standard ASCII file with a ".LOG" extender and a prefix designating the current month and year. The files are stored in the path specified for AutoDial in the Terminal Set Paths command. For information on which activities are logged, and the manner in which they are recorded, see the Appendix on Activity Logs.

Disconnect tells your modem to hang up, using the method you selected in the Dial Options dialog in the Terminal Select Menu.

The AutoDial Directory



Terms

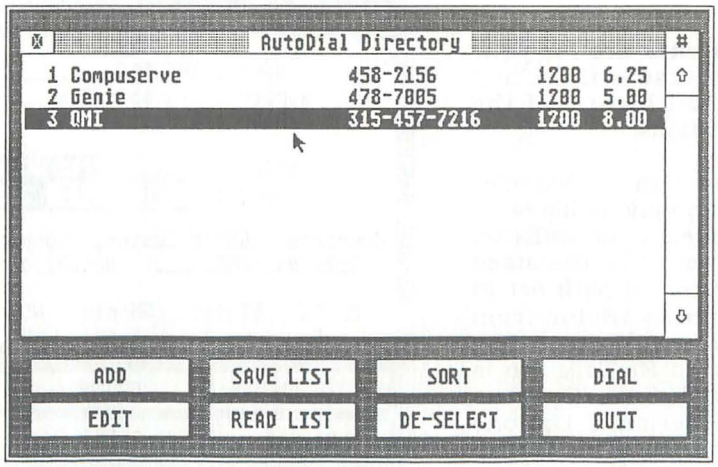
Baud Rate
Button
Character
Close Button
Highlighted
Scrollable List

The ***AutoDial Directory*** contains a scrollable list of up to 372 numbers you can select for dialing. Each entry contains a name of up to 24 characters, a telephone number of up to 32 characters (keep in mind that your modem doesn't need to see the dashes if you run out of space), the baud rate you want to use for this number, and the $/hr amount (for services which cost).

Items of interest on the AutoDial Directory include the following:

1) The ***Close Button*** functions the same as the QUIT Button on the bottom of the screen.

2) The ***# Button*** shows the number of entries (records) used and available.



3) ***Clicking on an entry*** highlights it, for EDIT, Save LIST, or DIAL functions, all described below.

4) ***ADD*** provides you with a blank Entry form, in order to add another number, or perhaps a new entry for an old number (see the section on AutoDial Entries, next).

5) ***EDIT*** allows you to change or delete an existing item: select the item by clicking on it. If more than one item is highlighted, you will end up editing the last number selected.

6) ***SAVE LIST*** allows you to create a list of entries which you have highlighted. This is handy when you have a list of numbers you want to dial one after the other, presumeably with AutoPilot files to handle the chores for you when you reach the other end. You might have different lists for different purposes, or different days, or whatever.

7) ***READ LIST*** highlights a saved list of entries, which then may be dialed.

8) ***SORT*** will let you see the list sorted by name, number, or baud rate.

9) ***DE-SELECT*** unhighlights all highlighted entries.

10) ***DIAL*** dials all highlighted entries, continuing until all numbers have been reached or you have pressed the UNDO key.

11) ***QUIT*** returns to the Terminal screen.

AutoDial Directory Entries

Each *AutoDial Directory Entry* contains a wealth of information: which means that to understand the power at your fingertips, you will have to wade through a bit of information.

The Entry Fields

Name, Number and $/hr are as they say (if you haven't been on one of the information networks such as GEnie or Compuserve, they cost $/hr).

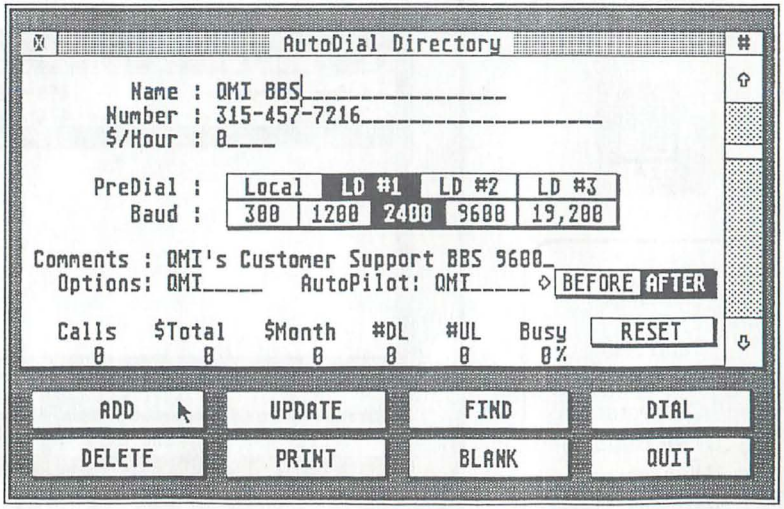
PreDial refers to the command string sent to your modem, which you set in the Dialing Options Dialog from the Terminal Select Menu.

Baud sets the baud rate for this particular telephone number.

Comments are for your personal use only. They aren't used by any of the other functions.

Options is the 8-character name of an options file (with a .OPT extender or suffix on it), which must be contained in the AutoDial path set in the Set Paths Dialog from the File Menu. Virtually any setting with ST-Talk Pro is saved with Save Options from the Terminal Options Menu, thus allowing you to reconfigure the entire program for each entry in your dialing database. For example, one telephone number might use VT-100 emulation, another might use VT-52, some might be half-duplex, others full-duplex, etc. You could set all these options from within AutoPilot, the ST-Talk Pro Programming language but this is an easier way, if you don't need the other programming capabilities.

AutoPilot is the 8-character name of an AutoPilot file (with an .AP extender or suffix on it) which must also be contained within the AutoDial path set in the Set Paths Dialog from the File Menu. This AutoPilot file can be made to run before any number is dialed, thus effectively preempting the dialing of the number itself, or it can be made to run after the number has been dialed and connection has been made.



Terms

Baud Rate
Command String
Criteria
Database
Dialog
Extender
Full-duplex
Half-duplex
Path
Suffix
VT-100
VT-52
Wildcard

AutoDial Directory Entries

The ***BEFORE*** button option is useful for situations where you want AutoPilot to do the actual dialing, for some complicated reason or another.

The ***AFTER*** button option is likely to be used most often, for things like logging on to other computer hosts, and then automating the collecting of messages, downloading of files, and such.

The Bottom Line

The bottom line of an AutoDial Directory entry shows statistics for this particular phone number: the number of calls made, the $ total, the $ total for this month, the # of downloads, the # of uploads, and the % of busy signals reached. These statistics are updated only if you have Activity Log turned on in the Dial Menu. The ***RESET*** button allows you to reset all these figures to zero.

The 8 Buttons

Some of the buttons at the bottom of the Entry are adjusted in function, depending upon whether you are in the main AutoDial Directory, are Adding/Editing an entry, or are Installing an entry in the dropdown menu (a process described in the Dialing Tutorial).

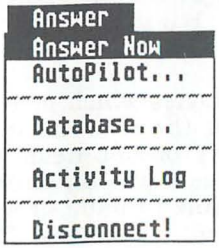
The **ADD**, **DELETE**, **UPDATE**, **PRINT**, **DIAL** and **QUIT** buttons are self-explanatory.

FIND looks for all Entries which match the criteria specified in the search: and those criteria can be ANY or ALL fields of the Entry. When you have found an entry, the ADD button is disabled (made grey), since that action would not make sense for an existing entry.

An example of FINDing: to FIND all Entries which use a 1200 Baud transmission rate, first BLANK the field using the BLANK button (how's that for getting ahead of ourselves!), then click on the 1200 BAUD button. Now click FIND: you will either be presented with the first Entry using 1200 Baud or be presented with a Top Of Search notice, letting you know that the search was unsuccessful (Top of Search means that the top, or end, of the database has been reached).

Note that you don't have to use any wildcards for searching. For example, BLANKing the Entry, typing Q in the Name field, and then FINDing, will bring up QMI in the search, since the Q matches.

The Answer Menu



Your modem knows the difference between answering the phone and dialing the phone: it actually adjusts its pitch, the sound you've heard if you picked up your phone, or have a speaker on your modem, depending upon whether it is the caller or the answerer.

So, because there might be times when you want to be the answerer, there is an ***ANSWER Menu,*** and an associated *Answer Options* dialog off the *Select Menu*.

Answer Now sends the Smart String set in the Answer Options dialog in the Terminal Select Menu, which tells your modem to pick up the phone in answer mode. The default string of ATA will most likely work with your modem.

The most common use for the ***Answer Now*** will be when you are talking with a friend on the phone and decide you want to transfer a file from his or her computer to yours. The procedure is for one of you to click on *Answer Now*, and the other to *Keyboard* from the *Dial Menu*, and just type *<Return>*. If you're not both in half-duplex, you'll find out when you can't see what you are typing. <A>D will toggle duplex. If you find that typing <Return> doesn't bring you down to the next line, <A>L will toggle the end-of-line (EOL) linefeed, to fix that problem.

AutoPilot... brings up a FormAlert to let you choose between running the AutoPilot program in the current Editor buffer, or to bring up the QMI Fileselector for you to select an AutoPilot routine to run. Once you have made your selection, a message appears telling you that the program is waiting for the phone to ring. The number of rings ST-Talk will wait is set in the Answer Options dialog in the Terminal Select Menu.

Quick Keys

<A>A	Answer Now

The ***Database*** command gives you access to a built-in database which you can access directly or through AutoPilot commands. When selected, you will be presented with a QMI Fileselector asking you to pick a database. If you choose one not already created, you will be asked if you want to create a new one. For information on using the database directly and through AutoPilot, see the Database Tutorial.

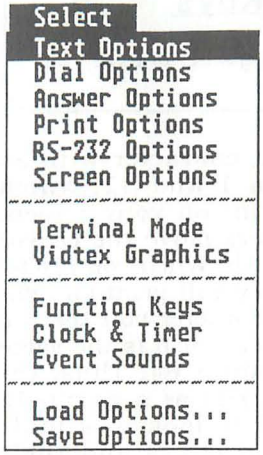
Activity Log toggles On and Off, as indicated by a checkmark when ON. This is exactly the same item as on the Dial Menu, except that the information logged is that generated by Answering activities, rather than Dialing activites. The information is kept in the monthly activity log, which resides in the AutoDial path set through the Set Paths command.

Disconnect hangs the modem up, just as the similar item on the Dial Menu.

Terms

Dialog
Editor
Buffer
Modem
QMI Fileselector
Toggle

Select Options Menu



Terms

<A>
<C>
<S>
Baud Rate
Directory
Duplex
Function Key
Macro
Protocol
RS-232
Terminal Emulation
Text
Toggle
XMODEM

ST-Talk Professional has many options which allow you to customize it for your use. These options are selected through the ***Terminal Select menu***. There are more options than can easily be remembered, so here is an overview of what is within each of items on the Select menu.

Text Options -- control the manner in which text is input and output through the modem. These do not affect the Editor, nor do they affect Send or Receive File using any of the error-catching protocols (XMODEM, etc.).

Dial Options -- let you adjust the program to your modem for dialing out purposes.

Answer Options -- the same as Dial, except for answering the phone.

Print Options -- make your printer do things they way you would like.

RS-232 Options -- adjust the low-level, nitty-gritty of telecommunications (baud rate, duplex, etc.).

Screen Options -- affect how text looks on the screen, in the Terminal and the Editor.

Terminal Mode -- select the Terminal Emulation Mode. A Terminal Emulation Mode means that the program can pretend that you are using a specialized terminal which controls screen display (e.g., wiping the entire screen blank) through standardized commands. Examples include VT-52 and VT-100.

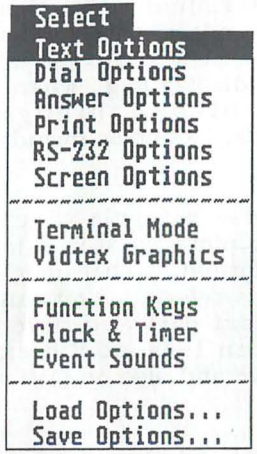
Vidtex Graphics -- a toggle which allows you to display pictures stored in Compuserve's Vidtex format. A checkmark appears when Vidtex is selected. You can leave it on for the most part and never know it's on. You can look at Vidtex graphics on Compuserve and also on QMI's BBS (315-457-7216).

Function Key -- set the Function Key Macros which allow you to assign AutoPilot programs to Function Keys, including <S>, <C>, and <A> Function Keys.

Clock & Timer -- set the time; set countdown timers for dollars and/or time, to be warned when you've been connected for a set time.

Load & Save Options -- you can have a default set of options (STT2.OPT, on the same directory as ST-TALK2.PRG); and you can have different sets that get loaded in automatically by your AutoDial Directory Database.

Text Options



Terms

<A>
ASCII
Buffer
CR
Dialog
Emulation
File
Flow Control
Prompt
Protocol
Text Upload
XOFF
XON

The ***Text Options*** dialog from the Select Menu allows you to control certain aspects of Terminal operation as well as certain aspects of Text Uploading. Terminal operation of course refers to any text which you see appearing on your screen transmitted by another computer. Text Uploading refers to the transmission of a file or a buffer to the other computer.

The first group of fields in the Text and Uploading Dialog refers to Terminal operations:

Convert Linefeeds: a character (ASCII value of 10) which in olden days would make the platen (the roller) in the typewriter move up a line. At the end of ST lines (EOL) there is a Carriage Return and a Linefeed. Some systems send only a Carriage Return. One general solution is to strip any Linefeeds that come in (by selecting NONE) and make each Carriage Return issue both a Carriage Return and a Linefeed.

Convert Returns: a character (ASCII value of 13) which in olden days 'returned the carriage' to the beginning of a line. Now it does the same thing, but to the cursor. As mentioned above, the default setting of Linefeeds: NONE and Returns: CR/LF should take care of most situations. If you find yourself with double-spacing, or with no spacing at all, use the <A>L toggle, to change the LF at end-of-line (EOL) setting.

Quick Keys

<A>L	Toggle LF @ EOL

Control Codes: a character with an ASCII value between 1 and 31, which ordinarily doesn't print on your screen. Some control characters move the cursor around a bit and so forth. When you SHOW control characters, they will print as light grey characters: the character you see will the that ASCII character which is the value of the control character + 64. Thus, the escape (Esc) key will print as a grey [. To interpret control codes, look in a table which has ASCII characters and their values. You can SAVE but not SHOW control characters; or you can DELETE them. If you're really thinking, you'll wonder "what happens to the Carriage Return and the Linefeed? Aren't they control characters?" Yes they are; and no, they aren't deleted (unless you do that through the Convert Linefeeds and Convert Returns fields in this dialog).

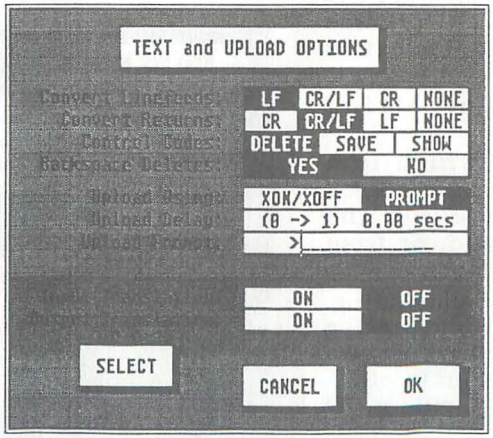
Backspace Deletes: that's what backspaces ordinarily do; except that when using VT-100 emulation, they'd better not, so they don't. If you want to set it manually for some arcane reason, here's where.

The next four fields are used in Uploading Text: from a file or from a buffer. It's important to remember that this is different than Send File, where an error-catching protocol is used.

Text Options

Upload Using: sometimes called Flow Control, these two options are the most popular methods for synchronizing the computers.

- ***XON/XOFF*** uses a special signal so that the two computers can tell each other when it's OK and not OK to send more material. XON/XOFF must be selected if you want to automatically send an XOFF signal when you access ST-Talk Pro's menus (which in turn is important if you want to be certain not to lose any information).
- ***PROMPT*** method of flow control specifies a string of characters the other computer is using to signal the beginning of an input line. For example, GEnie in it's editor sends n> (where n is the line number) at the beginning of each line. For GEnie, then, you would put > in the Upload Prompt field, at the bottom of this subsection of fields.



Upload Delay: sometimes you will have to slow down your transmission by inserting more time between each character you send. This might be the case on a really poor transmission line. Hopefufily you'll never need this option.

CR Delay: some online services, e.g., CompuServe, have editors which don't give prompts, but still can't keep up with fast transmission rates. The answer there is to put a delay in at the end of each line, allowing the service to catch up. You are likely to find some use for this option.

Upload Prompt: if you are using PROMPT flow control, put the prompt for which to wait in this field.

Input & Output Translation: some computers use different ASCII values for letters than the ST. The 8-bit Atari is one of these. By loading a new Input and Output Translation file, and selecting these options, you can maintain communications.

- ***Making Translation Tables***

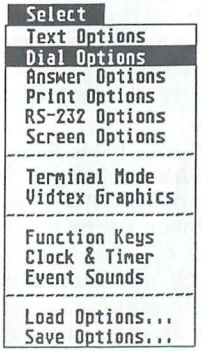
  To make a translation table file, use any editor capable of producing ASCII output (the ST-Talk Pro editor is just fine), and write lines such as the following (which would correct one of the problems when communicating with a Commodore 64):

  8 = 20; 20 = 8

  The lefthand side is the output translation; righthand side is the input translation.

Fortunately, there are plenty of smart people out there who will undoubtedly make up translation tables for every conceivable purpose and put them up on BBS's and information services for those of us who are, well, average.

Dial Options



The ***Dialing Options*** Dialog takes the work out of using your modem. Smart modems, sometimes referred to as Hayes Compatible Modems, make use of what are called Command Strings. Actually, you see, we have to be smart enough to tell the modem what to do, and we do that by sending along groups of characters called strings. The letters "ATDT", for example, tell the modem to tone dial the numbers which follow it. "ATDP" does it for non-tone, i.e., pulse dialing.

To complicate things a bit more, some modems need to have a "smart string" sent to them AFTER they have dialed a number.

Now, you could enter all these letters and numbers from the keyboard, but that would be a lot of work. How ST-Talk Pro handles these and other matters relating to modem use is handled in the Dialing Options Dialog.

The first group of fields are the ***Dialing Strings***. Notice they come preloaded with ATDT. Each field consists of three parts:

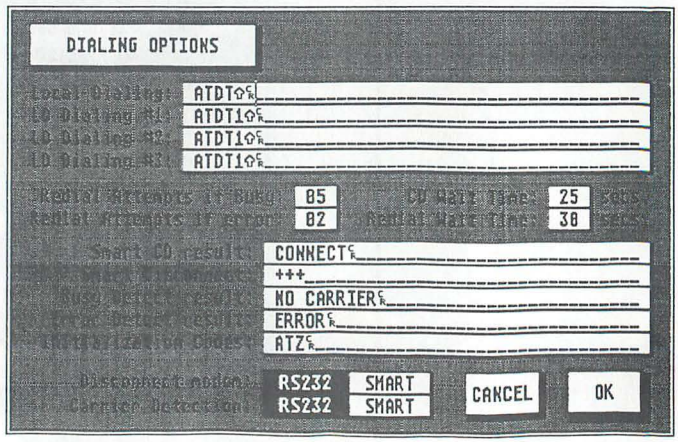
1) The predialing string (defaulted to ATDT);

2) An Up Arrow which is a symbol for where the number itself will be inserted from either the Keyboard Dial command, or from the Directory Dialing Database;

3) Room for a postdialing string, after the Up Arrow and before the Carriage Return (CR). (If you erase the Up Arrow by accident, <C>A puts one back in; <C>M puts a CR back in.)

What you actually use for pre- and postdialing strings is between you and your modem. ST-Talk Pro just processes these items as you put them in.

The 3 lower fields, ***LD Dialing #1-#3***, allow you to put in codes for various long distance services you use. Where a pause is necessary in the dialing sequence, consult your modem manual. Some modems will allow you to wait for a second dial tone by using a ***W*** in the dialing string. For most other modems, a comma [,] inserts a pause which is usually about 2 seconds, and can usually be set to be any other length of time by setting what are called S Registers. Most modems can be told to retain those settings from one session to another. You can also create an AutoPilot program to run automatically on bootup (name it STT2.AP and put it in the same path from which the program was booted) and reset it that way, if your modem is smart but has a memory deficit.



Terms

AutoPilot
Carrier Detect
Command String
Dialog Field
Initialization
Postdialing String
Predialing String
RS-232
Smart Modem
Smart String

Dial Options

The two ***Redial Attempts*** fields, If Busy and If Error, tell the program how many times to attempt connecting if the line is Busy, or if an Error occurs (the most likely being if the line rings, but there is no answer).

CD Wait sets the carrier detect Wait Time: this is the number of seconds the program should wait to hear another modem after the line has been dialed. ***Redial Wait Time*** sets the number of seconds to occur between attempts when there has been a Busy or an Error. Both Wait Times can be reset directly from an AutoPilot program: this is useful if you want the program to adjust the length of Wait Times based on prior happenings (e.g., wait longer after a certain number of attempts; or, if you're the impatient type, wait shorter after a certain number of attempts).

The next set of fields refer to ***Smart Strings*** used by your modem.

1) Smart CD: what your modem sends to your computer when it connects with another modem. With Smart Modems you can usually tell it to send a string of characters, or to send a number result. You tell the modem what to do (most default to sending strings of characters), and also tell the program what to expect. The computer and the modem read the characters, and make decisions based on the characters. That's considered a pretty smart thing to be able to do, hence the terms 'smart modem' and 'smart' strings. Just make sure program and modem are doing the same thing.

2) Smart Disconnect: what your modem needs as a signal to hang up.

3) Busy Detect Result: what your modem sends to your screen when the other number is busy. Some modems, not so smart, don't know the difference between a busy and an error, and also send ERROR. This field allows you to adjust.

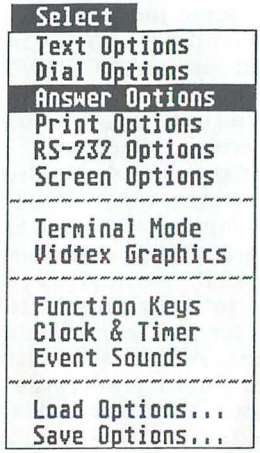
4) Error Detect Result: what your modem sends when an error is detected.

5) Initialization Codes: when the program boots up, you may want to set your modem's speaker volume, or reset it to a known state, by issuing what is called an Initialization Code. ATZ is the Hayes Compatible Command to clear things to what you had them set for in the modem's memory (if it has one). ATF resets the modem to the original Factory settings. Look in the modem manual for other codes.

The ***Disconnect Modem*** and ***Carrier Detection*** buttons give you a choice between RS232 and SMART options. RS232 refers to the configuration of the cable between your computer and modem, but as used here in the general sense means the use of electrical signals sent by the computer to the modem (Disconnect) or by the modem to the computer (Carrier Detection) as the means of communication. The same communication can be accomplished through the Smart Strings. The hardwired (that's a computer term you can throw around with family and friends) connection is generally preferred, although both should work just as well. If one doesn't work, try the other.

CANCEL will leave everything set the way it was before you starting changing things in the Dialog. ***OK*** enters the changes you made, for use in the current work session. If you SAVE OPTIONS, also from the Terminal Select menu, all will be saved for later use.

Answer Options



The *Answer Options* help control things when you are using the ANSWER menu and using Answer-related commands from within AutoPilot.

Referring to the Answer Options Dialog:

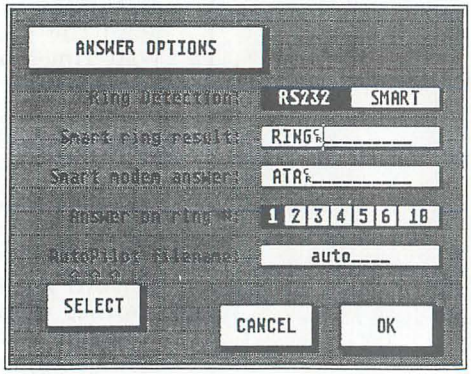
Ring Detection: Default mode is RS-232, because there is less room for error. Use the SMART (String) option if RS-232 doesn't work for some reason. This mode uses the string sent from your modem when it detects an incoming call.

Smart Ring Result: Default is "RING~" -- this is needed if you are using Smart String Ring Detection.

Smart Modem Answer: Default is "ATA~" -- this is the string which is sent to your modem to make it answer. If you encounter a problem with the ANSWER NOW menu item on the Answer Menu, check your modem's manual (although ATA is the Hayes-compatible string, so it's pretty much the norm).

Answer on ring #: Default is 1. When using the AutoPilot function from the Answer Menu, this is the number of rings to wait before answering the phone and running the AutoPilot program.

AutoPilot filename: When you click on the AutoPilot command in the Answer menu, you can click on the default name which has been entered here; or you can click on the SELECT button to select a different filename with the QMI Fileselector.



Terms

AutoPilot
Default
Dialog
QMI Fileselector
RS-232
Smart String

Do you need a more sophisticated Auto-Answering System? Take a look at QMI's BB/ST software available at your Atari dealer or direct from QMI.

BB/ST is a programmable online system for exchanging messages, electronic mail and files.

Call the QMI BBS at 315-457-7216 and take a look around -- we run BB/ST, naturally.

BB/ST is only $49.95

Printer Options

Select
- Text Options
- Dial Options
- Answer Options
- Print Options
- RS-232 Options
- Screen Options

- Terminal Mode
- Vidtex Graphics

- Function Keys
- Clock & Timer
- Event Sounds

- Load Options...
- Save Options...

Printer Options allow you to customize printer output.

The most vexing complication when printing is the issue of ***Linefeeds and Returns.*** Linefeeds, abbreviated ***LF***, are the equivalent of rolling a typewriter platen up a line. A Carriage Return, abbreviated ***CR***, is the equivalent of pushing the platen back to the first column. (You have to be about as old as I -- *HF* -- to have used a manual typewriter for a living.)

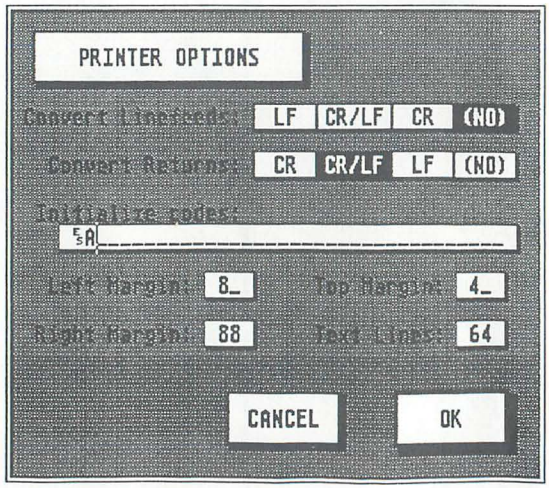
Most, but not all, computers will send only a CR, and not an LF -- so that your printer will likely, but not necessarily, print over and over again on the same line. The CR returns the printer to the beginning of the same line, over and over again. SOME printers, however, do not require an LF, so that if we supplied an LF for every CR, you might end up with double-spacing when you didn't want it. Sorry, you'll have to figure out what yours does, and what you need.

Trial and error is often the best teacher. The default setting does the following: it removes, or strips, LFs, and for every CR, it inserts a CR and and LF. If that doesn't work for you, experiment with other possibilities.

The four settings for when the printer output sees an LF are: send a CR, send a CR/LF combination, send an LF, or send nothing (NONE). Likewise, when it receives a CR, it can do any of the four options. The default is to strip any LFs, and for every CR, send a CR and an LF.

Initialize Codes allows you to use your printer's built-in font-setting and formatting features. This can be rather complicated. You don't need to set this in order to use your printer. Setting it to <Esc>@ is useful when using Epson-compatible printers, since it re-initializes your printer, preventing unwanted effects left over from the use of some other program. Typing <C>[@ in the Initialize Codes field will accomplish this. General instructions for entering information in the field are as follows:

a) letters and numbers: enter just as they are (beware, though: Epson printer codes will say they want a number, n, when what they really want is an ASCII value, n);



Terms

ASCII
CR
Control Code
Control Key
Decimal
Dialog
Epson Compatible
Hexidecimal
Initialize
LF

Printer Options

b) Control Codes can be entered directly, if you know the keystroke combinations, remembering that a Control Code is created by holding down <Control> and typing the letter with an ASCII value 64 greater than the value sought. The Escape code, for example, is ^[(hold Control key down, press the [key);

Thus, to get an Epson compatible to give you Elite type, Left Margin of 10, and skipover perf of 6 (3 each page), with initialization of the printer first, you could enter the following (where <C>[is typed, you would hold control and press the [key):

<C>[@<C>[M<C>l<C>@<C>[N<C>F

which translates to:

Escape @ : reset printer
Escape M : elite type size
Escape l 10 : left margin of 10
Escape N 6 : skipover perf of 6

The Margins can also be set in the dialog, the difference being that the computer does the counting rather than the printer. Note that you had better leave 80 columns between the *Left and Right Margin* if you are using one of the usual information services. If you want a bigger left margin, e.g., to punch holes for putting in a binder, you will want to use the Initialize Codes option to set the size of your printer's output, unless you have a fancy printer with a front panel. The *Top Margin* means from the perforation between pages and the *Bottom Margin* means to the perf. Three on either end is a pretty standard setting.

RS-232 Options

Select
Text Options
Dial Options
Answer Options
Print Options
RS-232 Options
Screen Options
Terminal Mode
Vidtex Graphics
Function Keys
Clock & Timer
Event Sounds
Load Options...
Save Options...

Terms

<A>
<C>
Accessory
Bit
Buffer
Character
Dialog
K
Protocol
RS-232

The ***RS-232 Options*** dialog contains items that you will likely never need to use with the exception of Baud Rate, and that is most easily set within the Directory listing in the Dial menu.

Baud Rate refers to the speed of transmission. 1200 baud is pretty much the standard, although with the advent of integrated chip sets for 2400 baud, it looks as though that will be the new standard.

Parity refers to an error checking scheme that isn't in general use these days, based on adding up the 1's and 0's which actually make up individual characters. Most systems ignore this, assuming NONE. A significant exception to this is VT-100 mode on Compuserve, which defaults to EVEN parity. You can reset CompuServe's parity setting or yours, so long as they end up matching.

Duplex refers to whether you see what you type on your screen or whether the other computer must echo it back to you.

- ***Full duplex*** means that the other computer has to echo it back
- ***Half duplex*** means that you see what you type, whether or not the other computer is echoing back: if it is, you'll see two of everything.

Send Echo is the other side of Duplex: if you are the "host" computer and you send an echo, the calling computer can run in Half Duplex. By the way: when you are uploading or downloading files using Send or Receive File, this becomes irrelevant as the transfer protocol takes over for that period of time.

Quick Keys

<A>B	Toggle Baud Rates
<A>D	Toggle Duplex Half/Full

XON/XOFF refers to a method of starting and stopping transmission during Uploads or Captures based on sending certain character sequences.

<C>S = Pause
<C>Q = Restart from a Pause
<C>X = Abort

Buffer Size is a value which you will want to adjust based upon your habits of using the program. The default, 4K, means that your computer will store up to 4K (4096) bytes of received data, while you are doing something else like listing and viewing a file, for example, before anything is lost. How long is that? Well, 1200 baud means that 1200 bits of information are transmitted each second. Now, you might think that there are 8 bits of information for each character, but there's also a stop bit, so that makes 9. Which means that you end up receiving 133.3 characters per second. So that 4K would give you about 30 seconds before you ran into a problem. At 2400 baud, you would have only 15 seconds. So, if you plan to do lengthy disk accesses, or use an accessory while text is coming into a buffer, you might have to use a larger buffer.

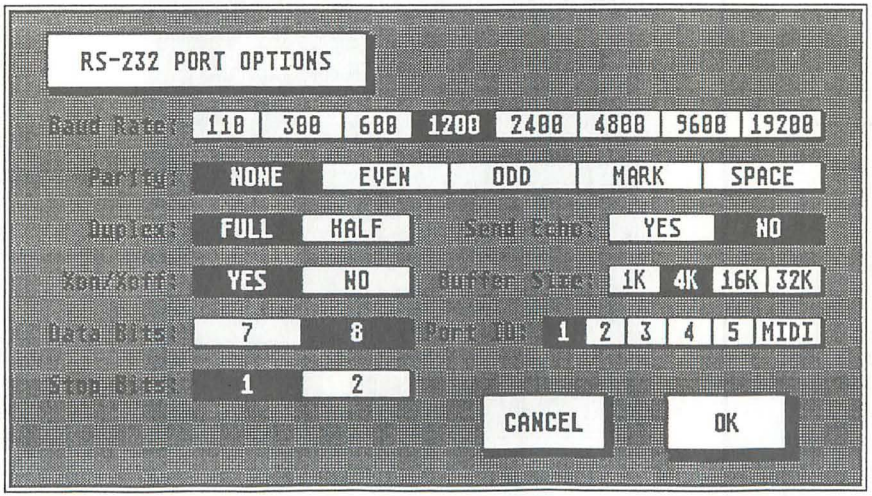
NOTE that the buffer size is saved when you Save Options.

RS-232 Options

Data Bits refers to the number of bits which make up a character. In older systems, 7 bits were used since that's all a teletype needed to function. In today's systems, where graphics are becoming much more common even in telecommunications, 8 bits is the usual. Usually, if you set for 8 the host system will adjust.

Port ID is one of those sexy options we hope we get to use some day. In theory, you see, you can plug in what is called an RS-232 breakout box, and have more than one RS-232 port on your ST. In fact, you can buy one of these off the shelf for about $400. With the right drivers written, you could select which of the ports you were using at a given moment. In theory also, you could program the MIDI port to act as an RS-232 port. For the time being, leave it at the default of 1.

Stop Bits is another teletype holdover. Some of the teletype terminals were so slow, due to their mechanical action, that an extra bit needed to be inserted between characters: there would be 7 bits of character data, a bit for parity, and then 2 stop bits: time for the teletype to actually print the character and then get ready to receive the next character. The default is 1, and unless you have an awfully bad transmission line, you can leave it at that.



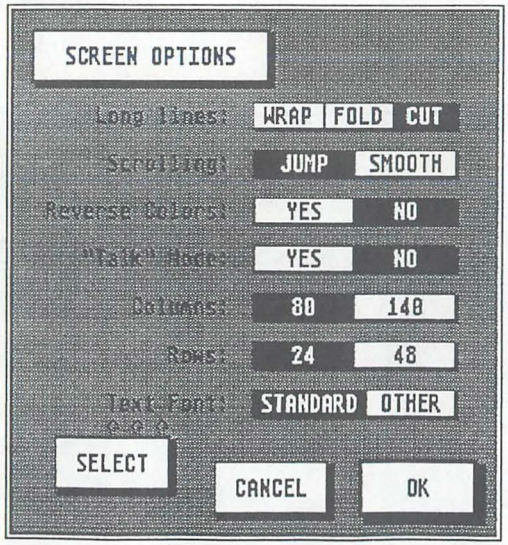
Screen Options

Select
Text Options
Dial Options
Answer Options
Print Options
RS-232 Options
Screen Options
Terminal Mode
Vidtex Graphics
Function Keys
Clock & Timer
Event Sounds
Load Options...
Save Options...

Terms

Button
Compile
Default
Dialog
Source Code
VT-100

The ***Screen Options*** Dialog will be used rarely in normal practice: partly because the default options will be the ones used most of the time, and partly because those options you do use will most easily be controlled through the use of alt-key (<A>) combinations. Make note that these options apply to the Terminal, not the Editor, with the exception of the number of rows and columns to be displayed on the screen.



Quick Keys

<A>T Talk Mode On/Off

Long Lines refers to how you want lines longer than the screen width (set at either 80 or 140 columns, in the Columns field in this Dialog) to be handled. The three options are:

Wrap: break between words, in effect wrapping the too-long line onto the next line on the screen.

Fold: wrap the line onto the next line of the screen, but break it wherever it happens to fall, even in the middle of a word. You might use this when you want to be certain that the saved file will look just the same as when written in: word wrap can insert an extra space when reformatting (to the original line length) occurs.

Cut: chops off lines exceeding the screen width. This can be useful when you are receiving a message formatted exactly to 80 columns. With Wrap or Fold, you would see double-spaced lines.

Scrolling refers to the manner in which the lines on the screen move upward. You might want to see what smooth looks like: it seems very strange (and a bit slower, too). Some people prefer this when reading online, as the lines don't jitter.

Screen Options

Reverse Colors does, well, just what you'd expect it to.

"Talk" Mode refers to the ***Type Ahead Window***: this is a 3-line box at the bottom of the Terminal Window in which you can type a message even while you watch text flow onto the screen from the modem. You send the text when you press *Return*, or when you fill up the three lines. Edit the text using *Backspace*.

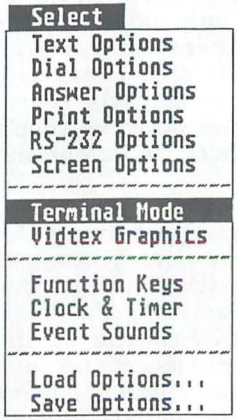
Typeahead is a way of saving connect time, since you can be composing a reply to a message even while you are reading it. It's also handy, of course, for online conferencing. If you have only a 1-line typeahead, you will only fit in 1-line messages, which means your thoughts will be broken up. Having 3 lines lets you keep thoughts together.

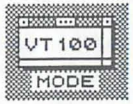
Columns lets you choose between 80 and 140 columns of letters on your screen. If you can read the 140 column mode in color, you've got better eyesight and imagination than I! Still, it needed to be included as part of the VT-100 emulation, so here it is.

Rows lets you pick between ***24*** and ***48*** rows of text, provided you are in mono (black and white). Why only mono? Simple arithmetic. In mono, there are twice as many pixels (the little dots that make up the screen) from top to bottom of the screen as there are in color. There would be simply too few to make readable characters on the color screen.

Text Font lets you choose between the standard ST font and any other you might choose to use. Font files have .FNT extenders. To load another font, you would first select the text font by clicking on the ***SELECT*** button and choosing the font from the QMI Fileselector. The filename of the font will be inserted in the *OTHER* part of the Text Font button. (Note: there may or may not be any fonts available at the time you get the program. Look on QMI BBS (315- 457-7216) for fonts, or QMI areas on GEnie (ST) or CompuServe (GO ATARIVEN) for information as to where they are available.

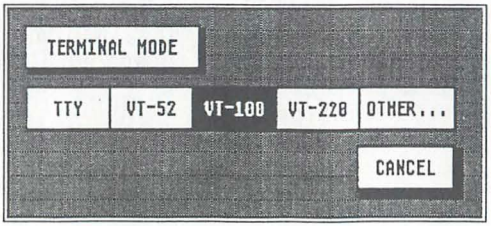
Terminal Emulation Mode





A ***Terminal*** used to be a piece of hardware which was wired to a mainframe computer. The mainframe would send out special codes to control the display of information on the screen. Terminal Mode emulation is the use of the same set of special codes to control the display of information on our screen. In effect, we emulate, that is we act like, that special terminal.

The ***Terminal Mode*** Dialog allows you to choose between various Terminal Emulation Modes. This is the same as clicking on the Terminal Icon to the right of the screen, or ***<A>M***. The name inserted in the Icon is that of the currently chosen emulation mode.



Quick Keys

<A>M
or
LMouse/Terminal Icon — Select Mode

TTY is the old-fashioned teletype mode, handy when you are blessed with a really bad telephone connection, because there isn't much to go wrong, and sometimes that's a good thing; or when calling an unfamiliar system, because most systems support TTY.

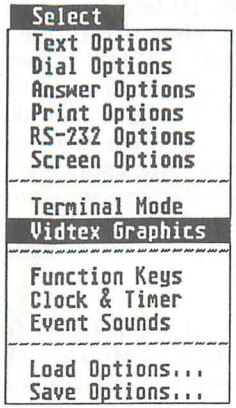
The ***VT-series*** are various versions (getting more complex -- what else?) of a protocol which gives screen control, as mentioned above. The 4 spaces in the lower right of the Terminal Status Line are simulations of VT-100 LEDs (little lights), which a real VT-100 terminal would have. Certain systems allow use of a full screen editor, when using VT-100 (or above) emulation. It helps to have a fast enough modem for this type of operation (1200 is wearying; 2400 is tolerable).

Other is an option to load an alternative terminal emulator, which will be active in future versions of ST-Talk Pro. As telecommunications becomes part of everyday life for more and more of us, options are bound to grow.

Terms

Dialog
Icon
LED
Mainframe
VT-100

Vidtex Option



What is VIDTEX?

Vidtex is a method for creating pictures on your screen by drawing them, line by line. Developed by ***Compuserve***, it is now used by a variety of telecommunications systems, including QMI's ***BB/ST*** BBS software. You can see it in operation on QMI BBS at 315-457-7216. You can turn *Vidtex ON* by clicking here.

Vidtex is independent of *Terminal Emulation Mode*: if you have it clicked ON (in which case it has a checkmark next to it), it checks each incoming character for that right combination which tells it to turn on it's picture drawing routines. It continues in that way until it receives the special combination which tells it to return to whatever mode it was in previously.

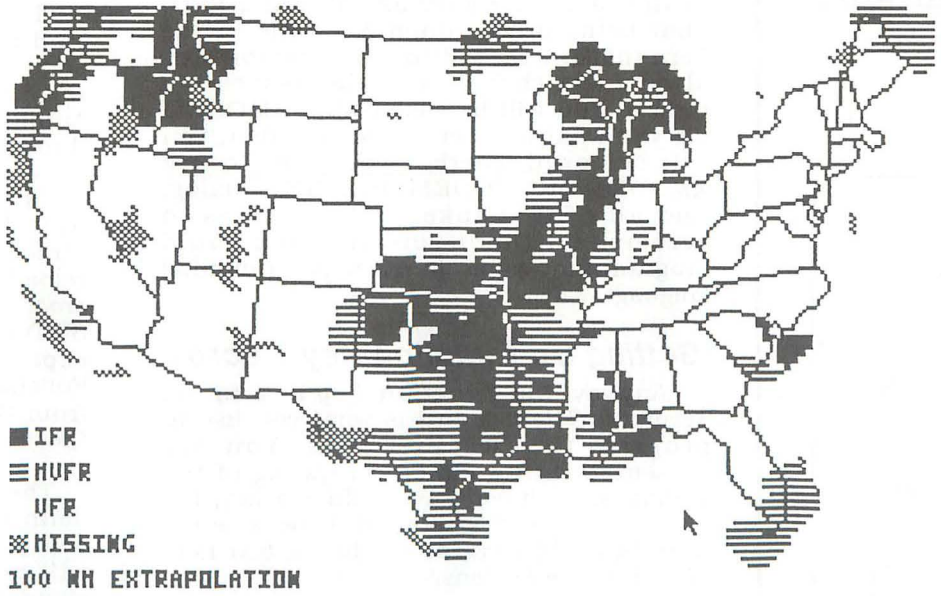
In otherwords, most of the time you can leave it turned on, and won't notice it until it becomes handy.

Quick Key

<A>V Vidtex Functions

VIDTEX Functions

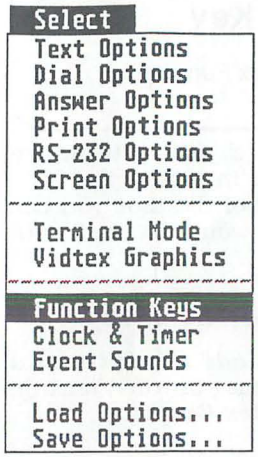
In the *Terminal mode's* ***Print menu*** you'll find more information on *Viewing*, *Saving* and *Loading* Vidtex Graphics.



Terms

Terminal Emulation
VIDTEX

Function Keys



What Are Function Key Macros

The ***Function Key*** Macro feature of ST-Talk Professional allows control of the computer through single key action. This is accomplished by allowing you to assign any 10-line *AutoPilot* program to any of the function keys, used plain, or with the shift, alternate, or control keys (<S>,<A>,<C>). In other words, you have 40 (count them, 40) possibilities. The 10-line limitation isn't much of one, by the way, since you can program a macro to run an AutoPilot program from disk.

To get an idea of what this feature can do, boot ST-Talk Pro with the ***STT2.FNK*** file which comes with the distribution disk in the same directory as ST-TALK2.PRG. That being done, touch ***F3*** while in the Terminal (in the Editor, a Function Key always switches you to the associated buffer). You will be asked what XMODEM file you want to receive. Not only that, you will be asked whether you want to use XMODEM or YMODEM, in a GEM dialog. And all of that takes only 10 lines to accomplish. Don't you wish you could program that easily in other programming languages?

Setting Up Function Key Macros

Anyway, the ***Function Key*** item in the Terminal ***Select Menu*** is what you use to program the function keys. You are presented with a dialog consisting of the various keys: if you have defined a key, the name you gave it is inserted. Otherwise the word *"< undefined>"* is put in the text field of each of the buttons.

Click on an ***<undefined>*** item, and you will have a dialog consisting of a name field (where the cursor starts), 10 text lines, and ***Cancel*** and ***OK*** buttons. Move from line to line using the TAB key, UP & Down cursors (UpArrow & DownArrow), or the mouse. You can also use *Return*, but that tends to skip around a bit before settling down. You can use Left & Right cursors, *Backspace* and *Delete* on portions of a line where you have entered text. What you put on the lines is up to you: it only has to be a valid *AutoPilot* program.

You can save a set of *Function Key* definitions using the **SAVE** button on the *Define Function Keys* dialog. You can also load a set you want to use. Since you can load a set from within AutoPilot, you can load a different set of *Function Keys* for each different number in your *Dialing Directory Database*, through the associated AutoPilot program; or you could load a set through the use of a Function Key!

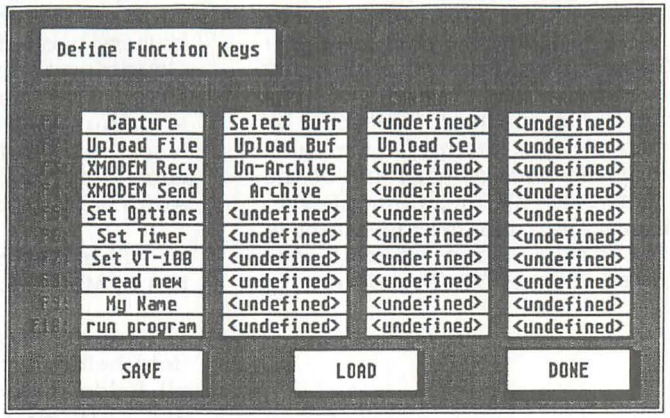
If you save a set of Macros saved as STT2.FNK, and put the file in the same directory as ST-TALK2.PRG, they will be reloaded when you start the program. As programmers begin to have fun playing with ST-Talk Professional's capabilities, you can expect to find AutoPilot programs and Function Key sets available for downloading from GEnie and Compuserve, as well as QMI BBS.

There is a special set of Function Key definitions on your ST-Talk Professional disk called *VT100.FNK*. These are what you will need to LOAD if you want to have standard ***VT-100 Function Key*** definitions

Terms

<A>
<C>
<S>
AutoCheck
Fn
Xmodem
Ymodem

Function Keys



available. In ordinary life this won't be very often: they're most likely going to be used when you are communicating with a mainframe computer which asks you to respond with certain Function Keys as part of an interactive program (such as an online editor).

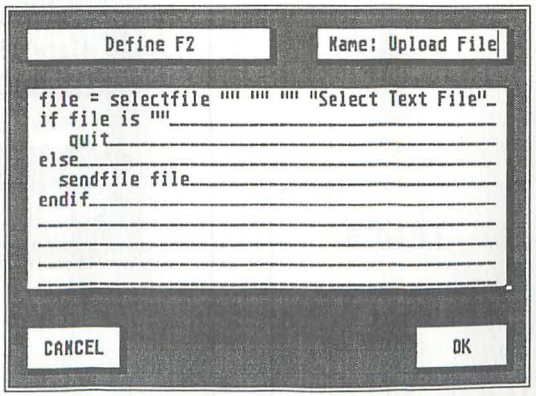
An Inside Look

Go ahead and click on the ***Upload File*** button in the ***Define Function Keys*** dialog (the F2 key). You will then see the individual key dialog, as shown on this page. This is the actual 10 line program you saw running when you touched **F2**.

The rest is up to you. If you haven't programmed much before, go ahead and play: if you have a backup of your disk, you can't hurt a thing. You might find it easiest to get the *AutoPilot* program running using an Editor buffer and the *<A>G(o)* command: you will have the syntax checker (*AutoCheck* on the *Editor Help Menu*) available, and editing will be a bit easier. Be careful: this kind of fun is addictive.

In The Editor

In the ***Editor***, the *plain Function Keys* (Fn) select the same numbered Editor buffer, and the *shift*-Function keys (<S>Fn) load the same numbered Editor buffer. Thus, they are not available for use for Macros. The *alternate* (<A>) and *control* (<C>) functions keys are available.



Set Clock & Timer

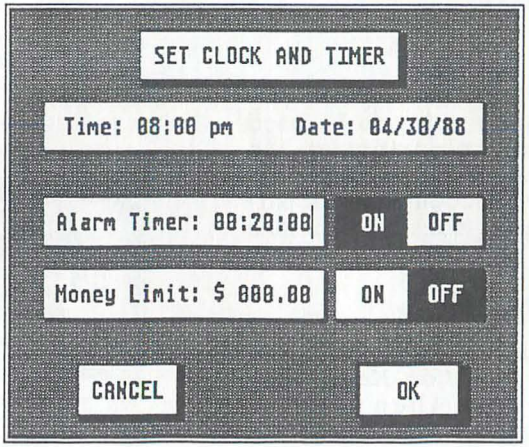
Select
- Text Options
- Dial Options
- Answer Options
- Print Options
- RS-232 Options
- Screen Options

- Terminal Mode
- Vidtex Graphics

- Function Keys
- Clock & Timer
- Event Sounds

- Load Options...
- Save Options...

In the ***Set Clock And Timer*** Dialog you can set the Clock (if you don't have *DeskCart* and have it set for you), and you can set a Countdown Timer and Money Limits to be observed when engaged in a call with another computer. This can be important when you are paying for the calls, either with long distance or with one of the information networks (GEnie, CompuServe, etc.). The Money Limit alarm calculation is based on the dollars per hour ($/hr) amount entered in the *Dialing Directory Database*.



You'll have to set the time each time you turn on the computer, unless you have a battery-backed up clock with your ST. The Countdown Timer and the Money Limit are saved when you *SAVE OPTIONS*, however, and thus do not need to be reset. You can also set them through AutoPilot commands each time you dial (through the associated AutoPilot program).

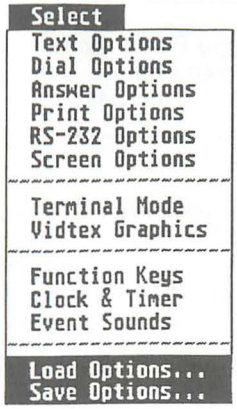
The Timer is set by entering the Hours:Minutes:Seconds.

Use the escape ***(<Esc>)*** key to blank the field before trying to enter information, for all fields in the dialog. Colons and slashes are entered for you: the computer will ignore you should you attempt to enter them.

Terms

Battery-backed Clock
<esc>

Load and Save Options

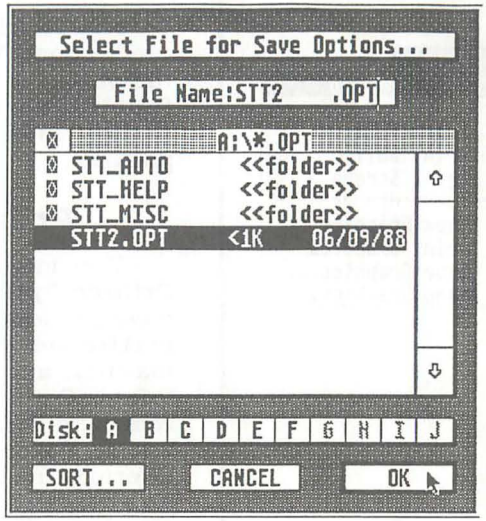


Many of the settings you can make in the program can be saved to an ***Options File*** and reloaded:

1) when the program starts up again (if the file is named STT2.OPT and placed on the same Directory as the ST-TALK2.PRG;

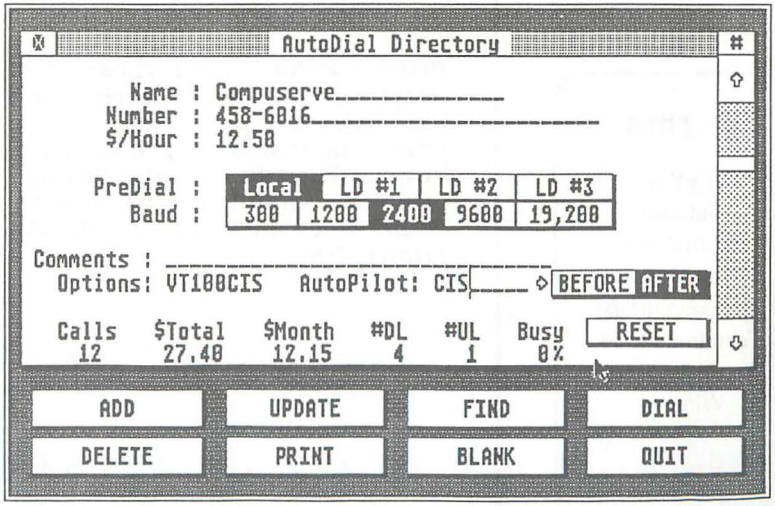
or **2)** if you manually reload it using the Load Options command;

or **3)** if you have specified an Options filename for an entry in the Dialing Directory Database. The file must be placed on the path specified in the AutoDial field of the Set Paths dialog in the File Menu. This feature allows you to reconfigure the entire program for each entry in your Dialing Database, with no further work necessary on your part.



You can also reload a set of options by

4) issuing the Loadopt command from within an AutoPilot program. Options can be saved from AutoPilot throught the Saveopt command.



Terms

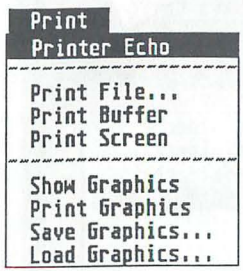
AutoPilot

Dialog

Directory

Path

The Print Menu



The Terminal ***Print menu*** divides into two sections: those features associated with the output of text to the printer, and those functions associated with the display, saving, loading, and printing of Vidtex graphics.

Printer Commands

You might need to select the correct ***Printer Options*** from the *Terminal Select menu*, unless the defaults suit you. This is matter between you and your printer manual, and may the better of you win. Printer Options save with the Save Options command from the Terminal Select Menu. If you save it as STT2.OPT and place it on the directory from which you boot ST-Talk Pro, your printer configuration will be automatically reset upon booting. With the Printer Options set, you are ready to use the Printer commands.

Printer Echo -- when clicked "on", all text being deposited on the screen by you or by the other computer will be sent to the printer, in addition to the screen. You might have a delay in actual printing, as most printers accumulate a full line before they bother to go ahead and print. *<A>P* toggles *Printer Echo*.

Quick Keys

<A>P	Toggle Printer Echo
<A><HELP>	Screen Dump
<A>V	Vidtex Functions

Print File -- uses the QMI Fileselector to select a file to be printed.

Print Buffer -- prints the currently selected buffer.

Print Screen -- the text you see on the current Terminal window can be printed, just as you see it. You are given a FormAlert choice of the window you are seeing, or the previous window. The previous window is the one you get when you click on the grey slider bar area to the right of the Terminal window. This is not a screen dump, which you would initiate with *<A><Help>*: it prints the text just as if you had had Printer Echo on when the text first appeared on the screen.

Terms

Buffer
Defaults
FormAlert
Printer Icon
Screen Dump
Terminal Mode
Vidtex
Window

The Print Menu

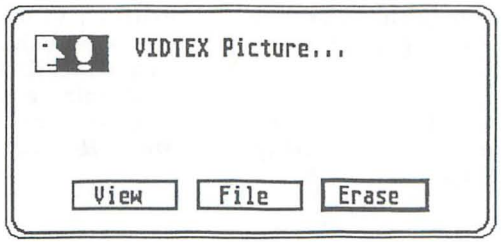
Graphics Functions

Vidtex is that method of graphics display created especially for telecommunications by Compuserve Information Service. With the functions in this group of the Terminal Print menu you can display, load, save, and print Vidtex graphics. One very nice capability of ST-Talk Pro is the ability to save Vidtex graphics as Degas format files (.PI#).

To receive ***Vidtex pictures*** select the Vidtex Mode, through the Terminal Select menu Vidtex item.

When you connect with the QMI BBS (315-457-7216) you will be asked if you can display a Vidtex picture. You can leave your Terminal Mode set in Vidtex, since the picture mode of Vidtex is turned on and off by a special sequence of characters sent by the sending computer. Start Vidtex Mode before the picture starts, because if you miss the special code sent to turn on the actual picture mode, ...well. ..back to the drawing board!

Accessing the ***Graphics Functions*** can be done by menu, or by a two-stage choice process initiated by ***<A>V***. Let's consider the menu items first, since the same functions are eventually reached by the alternate key method.



Show Graphics -- displays the current Vidtex picture. You will be prompted in the bottom display line that any key (or mouse movement) will erase the picture and show the terminal screen. You can show the picture again, if you want, because it still resides in its very own buffer, ready for you.

Print Graphics -- sends the current Vidtex picture to your printer or to disk: if sent to disk, a Degas file (.PI#) is created. The value of this is the ability to work with the graphic using the Degas Elite program.

Save Graphics -- gives you the QMI Fileselector to save the Vidtex picture currently in your graphics buffer.

Load Graphics -- lets you pick a Vidtex picture from your disk to view.

The ***<A>V*** key combination will present you with two successive FormAlerts giving you the choice to VIEW, FILE, ERASE a graphic, where:

- ***VIEW*** shows the graphic currently in the Vidtex buffer;
- ***FILE*** gives you the option to:
  - -- ***LOAD*** a Vidtex graphic
  - -- ***SAVE*** a Vidtex graphic
  - -- ***CANCEL*** the *FILE option* choice.
- ***ERASE*** allows you to clear the Vidtex picture from the screen and return to the normal text screen. The picture is still in the Vidtex buffer for Viewing again or for Saving.

To ***Send A Vidtex graphic*** to another terminal which will display it as it is received, do a Text Upload from the Text Menu, selecting the Vidtex file you want to upload.

Terminal Help

The Terminal ***Help Menu*** has two functions: to toggle the AutoRecord function and to provide online Help screens oriented to the Terminal.

AutoRecord, when turned ON as indicated by a checkmark placed next to the menu item, creates an AutoPilot program in the current Editor Buffer (displayed in the left corner of the Editor Status Line and in the lit Editor icon to the right of the Editor window).

AutoRecord will build a shell for creating an AutoPilot program. When turned on, sequences of text for which to wait, and the associated response, will be built. The best way to see what AutoRecord does is, well, to see what AutoRecord does.

1) ***Select an Editor buffer,*** Erase it (Text menu item), and then go back to the Terminal, turn AutoRecord ON, and then log on to a BBS.

2) Now, after you have ***logged on and logged off***, go to the Editor and save that buffer, giving it the name of your choice, but being sure to put it within the path named in the AutoDial field of the Terminal File Menu Set Paths item.

3) If it isn't already, ***install the number*** you dialed in the Dialing Directory Database.

4) Put the name of the file from Step 2 as the ***AutoPilot filename*** in the ***Dialing Directory entry*** from Step 3.

Quick Key

<C><HELP> More Help Selector

5) Now, ***click on the Dialing Directory entry*** from the Install Menu, and you will see that all or most of your previous interaction with the other computer is played over again. Some changes might occur because your interaction might have reset certain functions within the other system, causing it to behave differently this time. That's why it's important to be able to edit what is AutoRecorded: you can create a program which takes these differences into account.

Help Files

By clicking on the other ***Help menu items***, you will be presented with Help screens based on the Help files (.HLP) contained in the path specified for Help in the Set Paths dialog of the File menu. You can write your own Help screens in an ASCII based editor (e.g., the ST-Talk Pro Editor), name them with the same names you see in the HELP folder on your ST-Talk Pro distribution disk, if you want to customize a bit. You can also write extra Help screens and access them through the ***More Help...*** item.

Terms

ASCII
Buffer
Distribution Disk
Path
Window

The Editor: Overview

When you enter ***the Editor***, you are entering what is known in computerese as a "mode": a different way of functioning. You will notice that the dropdown menu options change when you are in the Editor: this is appropriate, considering that you are in what is really a different program than the main part of ST-Talk Professional. We refer to being "in" the Terminal or "in" the Editor.

It is important to realize just what is being edited: you can be capturing text into one buffer, in the Terminal, and be editing another buffer, in Editor. The buffer you are in while editing will always be darkened in the corresponding icon, to the right of the editing screen.

The ***Terminal*** is still working while you are in the ***Editor***. That's right: you can still be receiving text, and can even watch it appear miraculously at the end of the buffer you are editing (provided you have toggled Capture Text ON). Or, you can be anywhere else in the buffer, and then jump to the end to see what's going on there. This can be very helpful when participating in online conferences, where you might want to review what has been said, and then jump back to see what you missed.

Once you are familiar with the commands in the Editor, you will see the many possibilities open to you, including this selection:

- Marking captured text as it comes in for saving to a file;
- Sending part of what has been received back as a message to other users;
- Creating messages for uploading:
  1) while offline. You can save money by sending messages after you edit them;
  2) while capturing new messages;
  3) while background downloading is taking place (once you have sent in your registration and received your copy of the background downloader).

You will undoubtedly find other uses which best suit your needs. Our intention is to provide you with the tools you need to accomplish your purposes.

If you are already familiar with the use of editors, you can probably get started by reviewing the list of Editor Commands in that section of the manual. If you are new to the use of editors, you would do well to take the time (about 30 minutes) to go through the Editor Tutorial, and then read through the Editor Menus section.

Quick Keys

<A>E or ***<RtM>Text Area*** — Toggle Terminal & Editor

Terms

<A><char>
Buffer
Capture
Editor Mode
Icon
Terminal Mode

The Editor: Overview

The Editor Screen

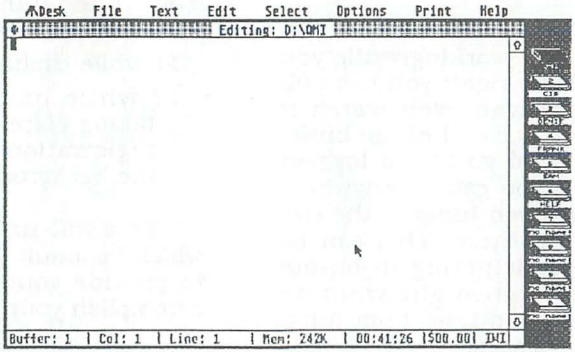
The Editor Screen consists of 4 parts, similar to the Terminal Screen:

1) The ***Dropdown Menus*** at the top of the screen.

2) The ***Editor Window***, consisting of the Title Bar line directly below the Dropdown Menus, the Slider Bar and Arrows to the right of the text display area, and the text display area itself.

3) The ***Buffer Icons*** to the right of the Slider Bar area.

4) The ***Status Line*** directly below the text display area.



The ***Editor menus*** will be discussed one at a time in the section to follow.

The Editor Window consists of 7 parts:

• The ***Close Button*** on the upper left of the Window: clicking this will initiate the process of Quitting the program. Not to worry about clicking on it by accident: you will be double-checked.

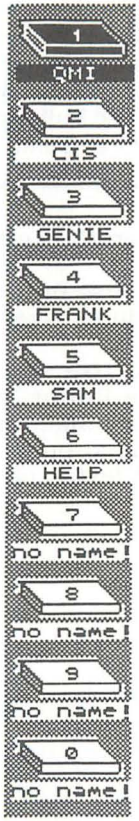
• The ***Title Bar*** at the top of the Text Display Area, which displays the name of the file associated with the Buffer you are editing. The filename without extender (i.e., the 8 characters before the ".") appear under the corresponding Buffer Icon to the right of the Window.

• The ***Text Display Area***, which is the large area in the middle where letters appear.

• The ***Up and Down Arrows***, which move the Display area accordingly, if there is more text than can be displayed in the Window at one time. Each click on an arrow moves the display one line.

• The ***Slider Bar***, which is the plain area between the two arrows: you can drag this with the mouse by holding the Left Mouse Button <LM> down while positioned on it, and dragging it up or down. The relative position of the Slider Bar in the vertical column correlates with the relative position of the of the cursor in the Editor buffer. If the bar is touching the top arrow, you are seeing the top of the file; touching the bottom means you are seeing the bottom; and inbetween is inbetween.

• the ***Slider Space***, which is the greyed or checked area between the Slider Bar and one or both arrows, when there is more text in the Buffer than can be displayed at one time in the Window. Clicking in this space will move the text display in that direction, less 2 lines of overlap, if there is that much text to move in that direction.



- the ***Status Line***, which itself has 7 components, which are from left to right:

1) the number of the current Buffer you are editing. The corresponding Icon is also lit (a computer term which means, in this case, darkened).

2) the Column number of the Cursor at this moment.

3) the Line number of the Buffer in which you are working.

4) the amount of Memory left to work with in the Buffers. This is a maximum: although ST-Talk does reuse lines which are deleted, there is some slippage, so that the actual amount might not be this much. You an re-initialize the size of the Buffers through the Re-initialize command in the Editor Options menu: but this will erase the current buffers.

5) the 24-hour time.

6) the money spent on the current call.

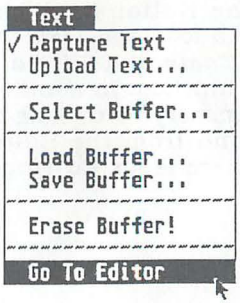
7) an Editor Options Flag showing, in order:

C = ***Control Codes*** turned ON;
I = ***Insert***, pushing what is ahead;
R = ***Replace***, writing over;
W = ***Word Wrap ON*** (wrap words);
U = ***Caps Lock ON*** (UPPER CASE);
L = ***Caps Lock OFF*** (lower case).

The ***Buffer Icons*** show the name of the file associated with them. The current Editor Buffer is darkened. You can select a buffer to edit by clicking on the Icon with left mouse (<LM>). If you click with the right mouse (<RM>) you will be given the QMI Fileselector, so that you can load that Buffer with a file. Be careful, though: this way of loading the buffer results in what is in the Buffer being lost. To insert a file at the cursor in the current Buffer chose the Load Buffer command (<A>L) from the Text menu, and answer NO when asked whether you want to Erase the current Buffer.

There are many keys associated with Editor control. In the Editor Keyboard Commands List, ahead a few pages, you will find the ***Editor Key Commands*** listed in order, and by general function. In addition, you can get a quick summary by clicking on the Keyboard command from the Editor Help menu. Finally, there is an ***Editing a File*** Tutorial.

Editor File and Text Menus



Terms

<A>
Background
Buffer
Icon

The Editor File Menu performs exactly the same functions as the File Menu in the Terminal. This is handy when you want to start an upload or download while editing once you have sent in your registration and received your background downloader).

There are no Quick Keys, since the keystroke combinations of <A>S and <A>R are used for other Editor functions.

The Editor Text Menu is almost the same as the Text Menu in the Terminal: the exception is the Exit Editor choice, quite naturally.

You can ***Exit the Editor*** in three ways, similar to the three ways of entering the editor:

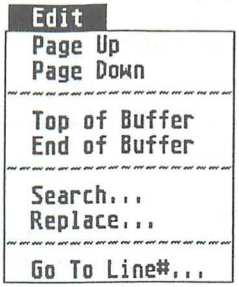
Quick Keys

<LM>Icon	Select Buffer #n
<Fn>	Select Buffer #n
<S><Fn>	Load Buffer #n
<RM>Icon	Load Buffer #n
<A>E or <RM>Window	To Terminal

1) Click on *Exit Editor* on the *Text menu*;
2) Press <A>E;
3) Click on the *Right Mouse Button* (<RM>) while in the editing screen area.

Note that when you use the Select Buffer... command in the Editor, you are selecting the current Editor buffer, and NOT affecting the current Terminal buffer (which is the one where Captured text is placed).

Edit Menu



The ***Edit Menu*** functions are available in mouse clickable form for use as you begin to learn the use of the Editor. As you go on, you will find it easier to use the keyboard commands: it's nice to have a choice as you're learning.

A full list of substitute keystrokes for the Editor is available through the ***Help Menu Keyboard*** selection. Two specific cursor movement keystrokes of note are *<S>RtArrow = End of Line and <S>LtArrow = Beginning of Line.*

Moving Around

Page Up (<S>UpArrow) moves the screen up by one page, less 2 lines (so you can be certain you didn't move too far).

Page Down (<S>DownArrow) moves the screen down (toward the bottom of the file) by one page on the screen, less 2 lines (for the same reason as above).

Top Of Buffer (<ClrHome>) moves to (guess where) the top of the buffer.

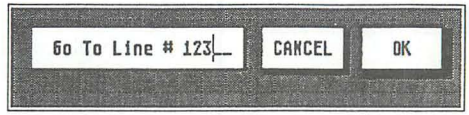
Bottom of Buffer (<S><ClrHome>) moves to (where else) the bottom of the buffer.

Search... (<A>F) brings up the Search Dialog (about which, consult the page immediately following this. With this function you can search for particular letter combinations, words or phrases, throughout the buffer in which you currently reside.

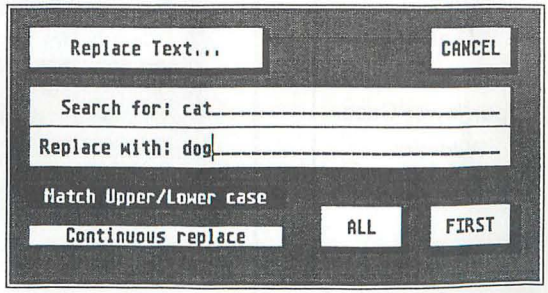
Replace... (<A>R) brings up the Search & Replace Dialog (see diagram at right and the next page).

Quick Keys

<S>UpArrow	Page Up
<S>DownArrow	Page Down
<Clr/Home>	Top Of Buffer
<S><Clr/Home>	Bottom Of Buffer
<A>F	Search...
<A>R	Replace...
<A>G	Go To Line#



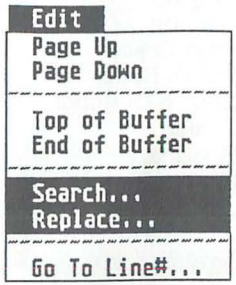
Go To Line#... (<A>G) brings up a dialog enabling you to select the ***nth line*** in the buffer. This is useful if you are programming, and are told by AutoPilot that you were a Fallible Human Being (FHB) on some particular line. It is virtuous to face one's mistakes, and so we must consider this unassuming command to be an instrument of your redemption and salvation.



Terms

<A>
<C>
Registered Copy
Alternate Keys
buffer
Control keys
dialog

Edit Menu



Terms

Button
Darken
Dialog
Field
Upper/lower Case
Wildcard

Search and Replace

Search and ***Replace*** will be familiar if you have used other word processors. Possible differences to note are:

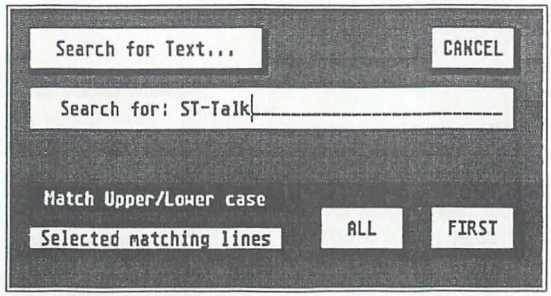
1) in Search, the capability exists to select (darken) those lines in which the key phrase appears;

2) in both Search and Replace you can choose to match or to disregard upper/lower case;

3) in Replace, you can choose to
- replace all matches without notification (pick Continuous Replace and ALL);
- possibly replace all matches, being queried about each possible replacement before it takes place (don't pick Continuous Replace, do pick ALL);
- replace only the first match (pick FIRST, regardless of whether you picked Continuous Replace).

4) partial matches are selected: if "be" is the string being searched, then the "be" in "being" will be found.

5) there are no wildcard searches.



Quick Keys

<A>F	Find Text String
<A>R	Replace Text String

For Those Unfamiliar With Word Processors...

Imagine you had written a letter to somebody named John, and it turned out that this particular John was spelled Jon. And imagine that you had used this person's name throughout the letter. Now, you could go through the letter and make the corrections by hand. Or, you could use Replace. In this case, you would want to use Match Upper/Lower Case (to avoid confusion with john, as in "going to the..."). You might also want to check each occurrence, just in case you missed some condition where you wouldn't want it to change. This is what you would do:

1) select the Search & Replace Dialog (mouse on the Edit/Replace menu, or <A>R);

2) type "John" in the "Search for:" field (that's actually a John without the quote marks, just to clarify);

3) type "Jon" in the "Replace with:" field;

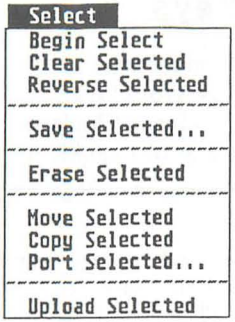
4) select (darken) the Match Upper/Lower Case button;

5) deselect (lighten) the Continuous Replace button;

6) click on ALL;

7) when the "Replace here?" Dialog appears, make the appropriate choice.

Editor Select Menu



The ***Select Functions*** allow flexible manipulation of text which can be quite useful in telecommunications. For example, you might have captured a long message and want to upload parts of that message to someone else. Doing so is as simple as marking the text and using the Upload Selected command ***(<A>U)*** to send it on its way. The ***Editor Tutorial*** contains examples of using the Select functions.

Begin Select (<Esc>) -- marks the beginning of a block of text to be manipulated in some manner. When this item is clicked, or when the Quick Key substitute is used, the menu changes to read End Select. <Esc> is also the Quick Key for End Select. A marked block of text is highlighted. The beginning and ending of marked block must be on different lines for reliable results to occur. ***You can mark as many different blocks as you want within the buffer, all at once: the operation you select will apply to all of them.***

Clear Selected (<A><Esc>) -- clears all selected text within the buffer.

Reverse Selected (<S><Esc>) -- changes all highlighted text to unhilghted and vice versa. This can be useful when you have marked all the text you want to save, and then want to delete the rest.

Save Selected (<A>S) -- this command ordinarily saves the entire buffer. If you have marked text, then only the marked portions will be saved.

Erase Selected (<A>K) -- K is the mnemonic for Kill, which is what this command does to highlighted blocks. There is no undo function, so "measure twice and cut once."

Quick Keys

<Esc>	Begin/End Selected
MouseDraw	Begin & End Selected
<A><Esc>	Clear All Selected
<S><Esc>	Reverse Selected
<A>S	Save Selected
<A>K	Erase (Kill) Selected
<A>M	Move Selected
<A>C	Copy Selected
<C><Insert>	Port Selected
<A>U	Upload Selected

Move Selected (<A>M) -- the highlighted text is moved to directly after the cursor. If you have highlighted many different areas, they will all be moved to that position. The moved portion will remain highlighted, in case you want to do something with it again.

Copy Selected (<A>C) -- like a move, except that the original block is left where it is.

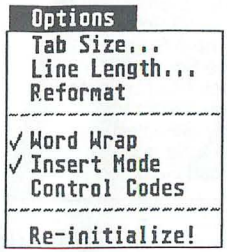
Port Selected (<C><Insert>) -- porting is a procedure for copying to another buffer. You first mark the text to be ported. Be certain the cursor is in the desired postion within the other buffer. Then, going back to the original buffer, issue the command. This will bring up a dialog asking you to indicate the intended buffer. When you have made your selection and click OK, you will be placed in the new buffer, with the ported text highlighted. This is handy in case you picked the wrong place and/or the wrong buffer, since you can port, move, or erase the text without having to try to find it among text which might have been in the buffer already.

Upload Selected (<A>U) -- the marked text is sent out the modem. As mentioned, this is handy for sending along parts of messages you have downloaded.

Terms

<A>
<S>
Buffer
Capture
Esc
Fn
Highlighted Text
Port
Upload

Editor Options Menu



Editor Options determine the way keyboard input will appear on the screen, and in the case of End-Of-Line Mode, how it will be saved to disk.

End-Of-Line Mode *[<A>Return]* can only be selected with this keystroke combination. The choices are LF, CR, and CR/LF. These have the same meanings as in the Text Options dialog from the Terminal Options menu. The difference is that they apply to text being input from the keyboard, rather than from the modem. CR/LF is the usual for the ST.

Tab Size... leads to a menu allowing you to set the spacing for Tab stops. Tab stops are like the old tabs on typewriters which actually stuck up on the metal structure along which the platen (the roller) slid back and forth. When you hit the tab key, the cursor moves to the next stop: if that is 1 space away, that's how far you move. This is different than some tab stops, which always move you a certain number of spaces. This kind of tab stop is handier for producing pages in which text is lined up.

Line Length... allows you to select the length of the lines with which you will be working. What happens at the column selected in Line Length depends on what you select for Word Wrap:

1) If ***Wrap is OFF*** (no check mark next to the Word Wrap item in the menu), then when the cursor passes the end of a line, the next character goes to column 1 of the next line.

2) If ***Wrap is ON***, then when the cursor passes the end of a line, the text will wrap to the next line. This means that the line being typed will be broken between words, with as many whole words as can fit contained on each line.

Reformat *[<A>SPACE]* allows you to reformat the buffer upto the next line which begins with a blank, or is entirely blank. In other words, this is a paragraph reformatting function. You will pull words up when doing ordinary deletes and backspaces and going over line ends, but the paragraph will not be reformatted.

Reformatting is also triggered by three other commands:

1) <A>Space will reformat from the cursor to the end of the current paragraph;
2) <S>Backspace will cause reformatting to occur when it backs up to the previous line;
3) <S>Delete will cause reformatting to occur when it 'eats' what was at the end of the line.

Quick Keys

<A>Space	Reformat Paragraph
<A>W	Toggle Word Wrap
<Insert>	Toggle Insert/Replace
<A><Return>	Set End-of-Line Mode

Terms

.RSC File
<A>
<C>
<S>
ASCII
CR
CR/LF
Control Code
FormAlert
LF
Memory
Text
TOS

Editor Options Menu

Word Wrap *[<A>W]* is the moving of a word at the end of the line to the line below if the word would go over the maximum length assigned (in Line Length...). When Word Wrap is ON, you will see a checkmark next to the Word Wrap line on the Options Menu of the Editor. The checkmark will disappear if you click on that same menu item again.

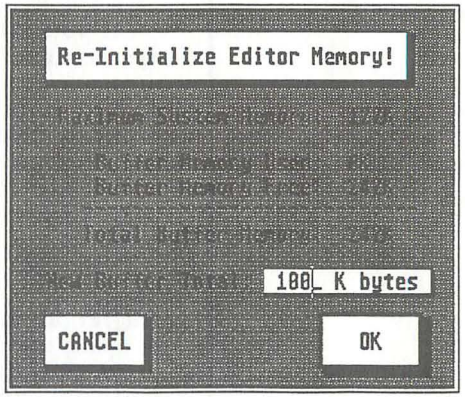
Insert Mode *[Insert]* toggles (turns off if on; on if off) whether text entered from the keyboard writes over what is there, or pushes the text ahead of it forward (and thus inserts letters into the existing text). When inserting you may end up pushing text past the end of the line length you have chosen: without moving from the end of your insertion, issue the Reformat command and all will be well.

Control Codes is a toggle which allows you to enter Control Codes (ASCII values below 32) directly into the buffer from the keyboard. You will see the control code displayed as a grey ASCII character, with the value that of the character you are seeing, less 64. Thus, <C>G, with an ASCII value of 7 (which rings the bell), would be viewed as a grey G. The Escape key (<Esc>) is a special case. It has an ASCII value of 27, which translates to a keyboard entry of <C>[. It can also be entered directly by the <Esc> key.

Control Codes will be displayed in material input from the Modem or from a file if the SHOW option from the Control Codes field of the Text & Upload options has been set ON. This command controls whether you can input Control Codes directly from the keyboard, which is a different matter.

Re-initialize allows you to change the amount of memory used up for the editing buffers. For example, you might want to set aside the amount of memory you keep available for other programs to run while you are still in ST-Talk Pro. When you Save Options from the Terminal Options menu, you will save the amount of memory allocated to editing as set by you through the re-initialize command.

***A WORD OF WARNING*: when you re-initialize, you lose what is currently in the buffers.**



The ***Reinitialize Editor Memory!*** Dialog shows the following information:

Maximum System Memory: this is the room you have in which to run a program, given the amount of memory currently allocated to the Editor buffers. However--The Operating System (TOS)

Editor Options Menu

sometimes breaks memory up into little sections, and programs almost always need unbroken sections in which to run. Thus the word 'Maximum': if you're lucky, this is how much room you have. How big a program can you run? It depends on how much memory the program uses in addition to its own size. You can make a first guess by using the *List & View command* to gauge the size of the program file (and any .RSC file associated with the program, since that also takes room). And of course, many programs (such as word processors) require additional space to hold the information they are processing.

If you attempt to ***Run a Program*** and are returned to ST-Talk Pro via an error message (or 2 bombs), you may have run out of memory. You might simply be dumped directly back into ST-Talk Pro, if the program you ran correctly checked for available memory. A related hint too complicated to explain: allocate your ramdisk and print spooler before you enter ST-Talk Pro (or any other program).

Buffer Memory Used: the actual amount of space used by the material you now have in your buffers. If you were to save the material, and then reload it, you would need this amount of space to hold it all. This is handy when you are downsizing, but want to be able to work with at least the amount of material you have in your buffers at the moment.

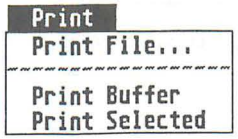
Buffer Memory Free: how much memory is not being used by the Editor buffers, and thus could be used for other purposes (such as running a program).

Total Buffer Memory: Buffer Memory Used + Buffer Memory Free.

New Buffer Total: you can reset the amount you want used through this option. If you want your Editor to always come up with the new amount allocated, go to the Terminal (<RM>Window or <A>E) and Save Options in the Terminal Select Menu.

OK: When you select OK, you will be erasing the current contents of the buffers (after being double-checked with a FormAlert). So: save what you want to use before re-initializing the Editor. CANCEL if you're not sure.

Editor Print Menu



You tell your printer how to print (what size, what quality, etc.) in the ***Printer Options*** choice of the Select menu in the Terminal.

You can print a file from disk or the current buffer. When printing from the current buffer, you can choose to print either the entire buffer or the highlighted area(s) of the buffer. When you use <A>P, you will be given a FormAlert to choose All or Selected, the latter being the portions of the current Editor buffer which are highlighted (darkened).

Print File: Prints a text from disk to your printer.

Quick Keys

<A>P	Print Buffer (Selected or All)

Print Buffer: Prints the text from the current Editor buffer.

Print Selected: Prints the selected (highlighted) areas of text in the current buffer.

Terms

Buffer
Dialog
FormAlert
Highlighted Text

Editor Help Menu

Editor Help Menu

The ***Editor Help Menu*** contains the *AutoCheck* toggle and a number of *Help screens.*

AutoCheck

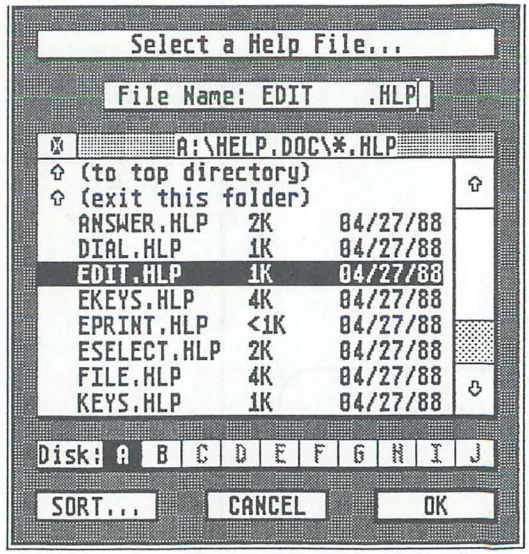
Autocheck is a syntax checker used when programming in *AutoPilot*. When turned ON, as indicated by a checkmark, it checks each line of the current Editing buffer, as the cursor moves to that line, to see if the line appears to be a valid AutoPilot line. IT'S IMPORTANT TO REALIZE THAT IT CHECKS EACH LINE INDEPENDENTLY: you might see error indications when you have a forward reference (where you refer to a subroutine or label which hasn't yet been defined). AutoPilot is smarter than AutoCheck and can handle forward references for labels (but not for subroutines).

Help Screens

The ***Help items*** bring up Help screens oriented to the Editor. In the path where you set the Help field in the *Set Paths* dialog from the File menu should be all the help files (with .HLP extenders) which came with ST-Talk Pro. You can customize these (the names are self-explanatory). And you can access other Help screens by clicking on ***More...*** and selecting from the QMI Fileselector.

Quick Keys

<HELP> "More Help" Selector



Terms

AutoCheck
AutoPilot
Label
QMI Fileselector
Sub-Directory
Subroutine
Syntax Checker
Toggle

Installing The AutoDial Directory

For information about the ***AutoDial Directory***, turn to the Dial Menu in the Terminal.

The purpose of this tutorial is to take you step-by-step through the process of installing items in the AutoDial Directory, installing an AutoDial Directory entry in the Dial dropdown menu, and using the installed item.

1) Setting Dial Options

Before you can use ST-Talk Pro with your computer, you may need to adjust the *Dial Options* from the *Terminal Select Menu*. Referring to the *Dial Options* section starting on Page 38, set the Dial Strings to suit your configuration of modem, type of dialing, and type of long distance service.

a) ***Type of Modem:*** the default strings of "ATDT" are appropriate for Hayes-compatible modems. These strings tell the modem to dial a number. If you have some other type of modem, adjust the string accordingly.

b) ***Type of Dialing:*** the last "T" in "ATDT" means that the modem will dial the number using "tone" rather than "pulse" dialing. Tone dialing make tones or beeps when you dial. Pulse dialing makes clicks, and usually uses a rotary dial phone. If you use pulse dialing, change the last "T" in the 4 dialing strings to "P".

c) ***Type of Long Distance Service.*** Notice that the 3 "LD" (long distance) dialing strings have a "1" inserted as a default. Normally, this is what you do to dial a long distance number. You might have an ***alternative long distance service,*** however, which requires you to dial a particular number, wait for a new dial tone, and then dial an authorization code, before you dial the actual telephone number. You can program ST-Talk Pro for up to 3 different long distance services (some are cheaper for one particular area being called). If you want to program for an alternative service, here is how.

1. After the "ATDT" (or "ATDP") string, ***insert the "access number"*** of the long distance service.
2. Now you must ***insert a command which tells your modem to wait*** until the number has rung, and has given you the new dial tone. For some Hayes-compatible modems, a "W" will make the modem wait until it actually hears the tone. If so, put a "W" right after the number you have just entered. If not, a "," will produce a wait, of usually about 2 seconds, for Hayes-compatible modems. Put in 2 or 3 of these, and your modem will simply wait at that point, giving the other number time to ring, pick up, and begin producing the dial tone.

d) ***Fill in the rest of the Options,*** as per the Dial Options instructions. You can probably get away with leaving them unchanged. If your modem issues "Smart Strings" that discriminate between "NO CARRIER" and "BUSY", you will find that ST-Talk Pro responds much more quickly to busy signals. If not set, it waits for a preset period of time, set in the CD Wait

Time field. Initialization Codes can be useful for resetting your modem's default settings, if your modem doesn't remember its settings. Check your modem manual to see if there is a command to make it remember its settings.

2) Filling The Directory

Once ***Dial Options*** are set, you can begin filling the Dial Directory, which is where you will store the numbers you call with your modem. The Dial Directory also gives you control over essential settings of your modem and of ST-Talk Pro.

a) ***Click on Directory...*** from the Terminal Dial Menu or on the Dial Icon (the thing that looks like a waffle at the right of the screen)..

b) From the *AutoDial Directory* list, ***click on ADD.***

c) ***Fill in the information*** for your first entry, in the changed *AutoDial Directory entry dialog*, which now appears with a Name, Number and various other fields. When finished with this entry, click on **ADD**. Refer to the description of the Entry Fields on Page 32 for information as to what to fill in.

d) ***Repeat step c)*** until you have entered all the numbers you call.

e) ***Click on QUIT*** from the AutoDial Directory dialog which has the scrolling list of AutoDial entries.

3) Installing A Dial Menu Item

Now, lets install an item in ***the Dial Menu,*** where the *<install #>* entries are when you first start using the program.

a) ***Click on an "empty" <Install #n>*** item. Because it is empty, it won't attempt to dial anything. Instead, you will be shown the AutoDial Directory list of entries.

b) ***Darken the entry you wish to install in the dropdown menu.*** If you don't see the one you want, you can click on ADD and enter it right now. If you do ADD an entry, you can click on either QUIT or INSTALL from the AutoDial Directory entry dialog. Then when you return to the main AutoDial Directory dialog, darken the entry you want to install.

c) ***Click on INSTALL*** on the main AutoDial Directory dialog.

d) ***Check out the Dial Menu*** to see if your entry was installed.

4) Changing A Dropdown Entry

Changing an already installed ***<Install #>*** item in the Dial Menu is accomplished by clicking on the entry *WHILE HOLDING DOWN THE ALTERNATE KEY*. You can then perform all the AutoDial Directory functions (except DIALing directly from the Directory).

To install a new entry or the same entry in that slot, darken it and click on **INSTALL**.

To make the entry empty, with the label *<Install #>* back in it, have no entry dark and click on **INSTALL** or on **QUIT**; or have an item darkened and click on **QUIT**.

5) Editing An AutoDial Entry

You might have occasion to change information regarding an AutoDial Directory Entry. Here are the steps to accomplish that.

a) ***Click on Directory...*** from the *Dial Menu.*

b) ***Darken the entry*** on which you want to change information.

c) ***Click on EDIT.***

d) ***Change the information.***

e) ***Click on QUIT,*** which returns you to the main *AutoDial Directory* dialog.

f) ***Click on QUIT,*** which returns you to the Terminal.

You can even change information on an entry which is already installed as an entry on the Dial dropdown menu. Make any changes you want, QUIT the edit, and the changed entry will now be used when the corresponding entry is clicked on from the Dial Menu. If you change the entry's Name, however, you will need to re-install the entry (see above on *"Changing A Dropdown Entry"*) in order to have that change reflected in the dropdown menu.

6) Using the AutoDialer

Finally you are ready to use your Dialing Directory. With your modem turned on and connected to the phone line and to your ST, how you dial depends on whether you have installed the number to be dialed in your Dial dropdown menu.

a) If it is installed in your dropdown menu, simply click on the number.

b) If it is not installed in your dropdown menu, click on the Dialing Pad Icon to the right of the Terminal Window, and that will give you access to the AutoDial Directory. From there, highlight the number to be dialed, and then click on DIAL.

c) If you have more than one number to dial, use the Dialing Pad Icon to bring up the AutoDial Directory, highlight ALL the numbers you want to highlight, and then click on Dial. ST-Talk Pro will then dial a number, connect if possible, and if not, move on to the next number. The program will continue this process until every number has been reached, or you have interrupted the process with the UNDO, which stops the dialing, and a <Return>, if you need to hang up the phone.

Editing a File

Move marked area	Reposition cursor a few lines below, press <A>M	Marked area moves to new position.
Unhighlight the marked block	<A><Esc>	Highlighting disappears
Re-mark the same block	Press <Esc> at first column of first line, and again on first column of line below the last line.	Area darkens
Copy the block	<A>C	A copy of the text appears, still highlighted.
Port the marked text	<C><Insert>	You will see the marked block.
Select the buffer you prepared to receive the text	<LM> on a new buffer number.	Dialog appears, from which to select a buffer to which you want the marked block ported. You are switched to the new buffer, and see the ported text highlighted.
Reverse selected text	<S><Esc>	The two lines you typed in before porting are now highlighted.
Erase highlighted text	<A>K	The two lines you typed are erased.

Saving to a File

When you're done editing, you will want to save your work. The only decision you will need to make is whether you are going to *SAVE* under the original filename or *SAVE AS* a new one.

Save a file from a buffer which has not been named	<A>S	If file exists (most likely, unless you changed a disk), a FormAlert appears asking whether you want to Replace, Append, or Cancel.
or Save a file from a buffer which has already been named	<A>S	
Save a file under a name different than that associated with the Buffer	<LM> Save Buffer from Text Menu	QMI Fileselector appears, and you make appropriate choices.

Toggle to Insert Mode, if not already set	Press <Insert> key	Observe R change to I
Type enough text of to push first line off end of line.	{Type anything you want}	Observe first line of program move over, off end of screen.
Reformat text	<A><Space>	Observe text wrapped down to second line.
Move to beginning of line	<S><LeftArrow>	Cursor moves to beginning of line
Move to the middle of the line	<RightArrow> as needed	Cursor in middle of line
Split line	Press <Return> key	Line is split at point where cursor was.
Rejoin line and reformat	<Backspace> key	Line rejoins and is reformatted
Move to beginning of line	<S><LeftArrow>	Cursor moves to beginning of line
Toggle to Replace Mode	<Insert>	*"I"* changes to *"R"* in Mode box in Display Line
Type over existing text	{Type a few words of your own}	Your words overwrite what was there.

Marking, Moving, Copying, Porting & Deleting Blocks

The ***Select functions*** work with *one or more areas of text* (often refered to as *blocks*). Through the following exercise, you will begin working with *Selected Text* and *Block Operations*.

Mark Start of block	Move to beginning of current line and press <Esc>	"Begin Select" on Select Menu changes to "End Select"
Move cursor down a few lines	<DownArrow> as needed	Cursor appears a few lines below original position
Mark end of block	Press <Esc>	Area from original cursor position to present poition darkens

Editing a File

Move marked area	Reposition cursor a few lines below, press <A>M	Marked area moves to new position.
Unhighlight the marked block	<A><Esc>	Highlighting disappears
Re-mark the same block	Press <Esc> at first column of first line, and again on first column of line below the last line.	Area darkens
Copy the block	<A>C	A copy of the text appears, still highlighted.
Port the marked text	<C><Insert>	You will see the marked block.
Select the buffer you prepared to receive the text	<LM> on a new buffer number.	Dialog appears, from which to select a buffer to which you want the marked block ported. You are switched to the new buffer, and see the ported text highlighted.
Reverse selected text	<S><Esc>	The two lines you typed in before porting are now highlighted.
Erase highlighted text	<A>K	The two lines you typed are erased.

Saving to a File

When you're done editing, you will want to save your work. The only decision you will need to make is whether you are going to *SAVE* under the original filename or *SAVE AS* a new one.

Save a file from a buffer which has not been named	<A>S	If file exists (most likely, unless you changed a disk), a FormAlert appears asking whether you want to Replace, Append, or Cancel.
or Save a file from a buffer which has already been named	<A>S	
Save a file under a name different than that associated with the Buffer	<LM> Save Buffer from Text Menu	QMI Fileselector appears, and you make appropriate choices.

AutoPilot Tutorial

The purpose of this tutorial is to introduce you to the use of a few of the many ***AutoPilot functions***. Even if you are not a programmer, knowledge of how to use these simple functions will allow you to customize your scripts even beyond those which you produce with AutoRecord.

The notation below follows that of the AutoPilot Commands section of the manual: any value returned by the function is show in square brackets [], while arguments which must be supplied to the function are shown in angle brackets <>. As a general principle, any function which sets a value, such as which buffer is to be captured, returns a number equal to the old setting. Thus, if you want to know for what buffer capture is presently set (if any), set the function equal to a non-existent buffer, and read the value returned.

oldbuffer = capture 100

will return the buffer number being captured, or 0 if none was set for capture.

Alert [button] <format>

The file ALERT.AP in the STT_AUTO folder on your distribution disk contains an example on usage of the ***Alert*** function. You can play with it by putting it into an editor buffer, switching to the Terminal *(<A>E)* and then running it with *<A>G*. By having it loaded and playing as you read this section, you can combine reading with doing.

The format for the ST-Talk Pro Alert function follows that of the GEM FormAlert function, although that won't do you any good if you don't know anything about GEM.

The general format is:

"[i][m1|m2|m3][b1|b2|b3]"

where

i is the number of the icon (symbol) to be used with the Alert:
0 = no icon
1 = man's head with a "!" ("hey, notice this!")
2 = man's head with a "?" ("what's your choice?)
3 = stop sign

m1 to m3 are lines of message text. These are left justified, so you might have to experiment if you want them to be centered. You don't have to use them; and frequently won't use the 2nd and 3rd lines, which is fine. You don't need to put the extra up-bars in if the 2nd and 3rd lines are blank.

b1 to b3 are the strings to put on the buttons. If you only have text for one button, you will only have one button displayed, and so forth.

Button 1 will ALWAYS be the so-called default button; which is to say, its outline will be darkened, and striking the Return key will select it.

It is important to realize that the different sections of the FormAlert argument are all within a single string. You can add up parts of a string to make the program legible.

Type the following into a buffer and run it.

```
fluid = "[1][I Prefer|To Drink][Pepsi|Coke|Water]"
choice = Alert fluid
Print "My choice is "
Print choice
```

• • •

***Capture** [num] <num> and **Erasebuf** <num>*

The ***Capture*** and ***Erasebuf*** functions perform the same functions as those in the Text Menu items associated with Capture and Erase. The format is:

Capture n
and
Erasebuf n
where ***n*** is the number of the buffer.

These are handy functions for use in your AutoPilot programs which run from the AutoDial Directory: you can erase the buffer in which you want to capture, and can then set Capture ON to that buffer.

To turn Capture off issue the command:

Capture Off

and to turn Capture on in the currently selected buffer issue the command:

Capture On

To try this out, type "Capture 2" in an empty buffer; go the Terminal (<A>E); turn Capture OFF (<LM>Capture Icon) if it isn't already; and run the one-line program (<A>G>). You will notice the Capture Icon turn ON; and the Bfr # in the Terminal Status Line will indicate that Buffer 2 is in use.

• • •

***Connect** [flag]*

The ***Connect*** function is mainly useful when you are not dialing from the AutoDial Directory, since you will only be passed on to the associated AutoPilot program if you are, indeed, connected. Its only function is to test whether your modem has connected with another modem, which it informs you by setting the assigned variable equal to True or False. As with any assignment, you can simply use the function as an implied variable:

```
IF NOT Connect
    Print "Failure to Connect~"
    Quit
ENDIF
```

• • •

***Download** [flag] <type> <name>*
and
***Upload** [flag] <type> <name>*

Download and ***Upload*** perform the same functions as those associated with the *Send File* and *Receive File* Dialogs, the difference being, of course, that you must know the path and filename (or, in the case of a download, just the filename). If you want, though, you can pick a path and filename through the selectfile function, and supply it as an argument to this function.

The two functions work with the same arguments:

Download <type><filename>
Upload <type> <filename

where ***<type>*** is a number representing the type of file transfer:

1 = plain Xmodem
2 = CRC Xmodem
3 = Ymodem
4 = Fmodem

and ***<filename>*** is a string containing the path and filename (filename only for download, except in the case of CIS-QB, where part of the protocol is to specify the path and the filename).

A typical usage might be:

path = Getpath 0
file = Selectfile path "" "*" "Pick File To Download"*
Download 3 file

Analyzing the above statements, Getpath sets *path* to the current path, using the current drive; Selectfile sets *file* to the filename desired for downloading; which *Download* then uses to execute a Ymodem download.

For more information on Getpath and Selectfile, see the descriptions in this section of the manual. Also, through the Function Key item on the Terminal Help menu you can examine the AutoPilot programs associated with F3 and F4, which use these same functions which were included in the file STT2.FNK on your distribution disk. If you don't see F3 and F4 loaded with programs, load the distribution STT2.FNK and you will.

• • •

Keyin *[ascii value]*

Keyin returns a key from the keyboard. Since like any AutoPilot function assignment to a variable is optional, you can use it like the ***Wait*** command, to halt program execution until a key is pressed.

keychar = keyin

sets keychar as a character type, and sets it equal to the next key pressed on the keyboard. Note that a cursor does NOT appear, so that unless you print a message to the user, s/he may not know what is going on. To test it, make a one words program in a empty buffer by typing "keyin". Run it from the Terminal, and the program will wait until you have typed a character.

• • •

Savebuf *[flag] <bfr><file><mode>*
and
Sendbuf *[flag] <bfr><mode>*

Savebuf and ***Sendbuf*** both use identical <mode> arguments: ***0*** = all text while ***1*** = selected text only. Typically, text would be selected using the <esc>...<esc> commands, which highlight areas of the text. You might make a Function Key macro, for example, for appending to a particular file (you will be prompted for Replace/Append/Cancel, as if you had issued the Save Buffer command from within the Terminal or Editor).

Typical uses of the commands would be:

Savebuf 1 "KI.TXT" 1

saves the selected contents of Buffer 1 to the file KI.TXT.

Sendbuf 4 0

sends all of Buffer 4 to the modem. This is the type of command which might be handy to have in a Function Key Macro to use when putting messages up on Bulletin Boards. You would create the message in Buffer 4, and then, when prompted by the BBS or Information Service, press the associated Function Key to which you had attached the single AutoPilot line. For information on setting up Function Key Macros, see the Function Key Macro section on Page 50.

• • •

Loadbuf *[flag] <bfr><mode>*

The Loadbuf <mode> argument allows you to either (0) erase the buffer into which you are loading the <file> or to (1) merge the file, at the cursor's place in the buffer.

When you load a buffer by clicking on a Buffer Icon with the Right Mouse Button (<RM>), you automatically select the erase (first) mode; the same is true when you select <S>Fn to load the nth buffer. To merge from the Editor, you must select the Load Buffer command from the Text Menu, which then asks you whether you want to Erase the buffer first.

When used in a program, you would usually use this with ***Selectfile***, in order to generate a filename for use as an argument:

```
path = getpath 0  | get path for current drive
file = selectfile path "*" "DOC" "Pick A Document"
Loadbuf file 0 | erases buffer before loading
```

• • •

Print *[num] <exp>*
and
Printm *[num] <exp>*

Print and ***Printm*** print to the screen and modem, respectively. The argument is any variable, or an actual value or string.

```
myname = "Hank is "
age = 43
Print myname
Print age
Print "~"
```

and

```
Print "Hank is 43~"
```

will produce the same results.

To print a carriage return (CR) you can use the symbol ~, which AutoPilot understands to mean a CR (actually a CR/LF, since that is what it takes to move the cursor to the beginning of the next line on the ST).

• • •

Run *[flag] <prog><args>*

The ***Run*** function might be useful to set up in a Function Key Macro when you are editing in the ST-Talk Pro Editor and are then going to use that buffer as input for another program. You could save the file (<A>S) and then use the following AutoPilot line in a Function Key macro:

Run <program> <commands>

where *<program>* is the name of your program, and *<commands>* is the name of the file you just saved. In most cases, whether you are made aware of it directly or not, calling an ST program with the filename to be used supplied as an argument in a command line will load that file automatically. Most Word Processors operate in that manner.

```
Run "C:\WWRITER.PRG" "NEW.DOC"
```

will run WordWriter from drive C and load in the document file named NEW.DOC.

You can use the ***Run*** command to start another AutoPilot program, too. If the program name ends with the suffix ".AP", AutoPilot will continue by running the AutoPilot file with that name. This method is very useful when *chaining* long programs together or for running AP files from a Function Key. However, there is no way to return control to the original AutoPilot file or Function Key.

• • •

Selectfile *[string] <path> <file> <ext> <title>*

The ***Selectfile*** function is extremely useful as it gives you a civilized manner of selecting a path and filename, by presenting you with the *GMI Fileselector* with which to make your choice. This is done by assigning the function to a variable, as in:

```
newfile = Selectfile "C:\STTALK2\" "*" ".ARC" "Pick ARC File To Send"
```

The four arguments of Selectfile allow you to customize the function to your use:

Path = Specification of the directory in which to start the fileselector. Examples:
"A:\" -- root directory on A: drive
"C:\STTALK2\" -- STTALK2 directory on C: drive

File = Specification of the default filename to use if none is selected.

Ext = Specification of the filter for the filename's EXTender (or suffix) (up to 3 characters following the period). Examples:
""* -- selects all suffixes.
"TXT" -- selects only files with the TXT suffix.
"DB?" -- selects DBF, DBT, etc., file extenders.

Title = A string which will be placed in the fileselector to describe its purpose. Example:
"Pick File To Transmit"

You can use an actual string, or a string variable, when calling the Selectfile function:

```
file = Selectfile "A:\" "ST" "TXT" "Pick File To Port"
   or
portpath = "A:\"
portfile = "ST"
portext = "TXT"
portitle = "Pick File To Port:
newfile = Selectfile portpath portfile portext portitle
```

• • •

Termtype *[num] <num>*

Termtype allows you to set the terminal emulation mode. This can be very useful when logging on to different information services. CompuServe, for example, can utilize VT-100, clearing the screen and spreading the display neatly over your computer screen (GO OPTIONS on CompuServe; set your Terminal, permanently; and be sure to set Parity for NONE, assuming that you keep your terminal set at NONE -- which you should, since that works just about anywhere EXCEPT for CompuServe's VT-100 default settings).

The 2 possible arguments for Termtype reflect the three major terminal mode emulations:

Termtype 1 sets ST-Talk Pro for VT-52. This setting will work for just about anywhere, but doesn't have the fancy screen handling which VT-100 allows.

Termtype 2 sets ST-Talk Pro for VT-100, which some BBSs and information networks allow. On some BBSs you will see a choice for ANSI terminal mode; this might also work, since it's a cousin of VT-100.

To test this function, notice that the Terminal Emulation Mode is reflected in the Terminal Window Icon to the right of the Terminal Window. Try the following program:

```
waitkey = "Print Any Key~"
Termtype 1
Print waitkey
Keyin
Termtype 2
Print waitkey
Keyin
Termtype 1
```

Go to the Terminal, and run the program, entering a key when instructed. Observe the change in the Icon as the program progresses.

• • •

Trace *[flag] <switch>*

Trace can be set *ON* or *OFF*. When set ON, each line of an AutoPilot program will be put on the terminal screen, in faint lettering, as the AutoPilot program runs. This can be a big help when you are running into unexpected pleasures while trying out a new AutoPilot program. Having it on will tend to mess up your screen display, because the cursor will be moved by having been used by Trace. C'est la vie.

• • •

Viewfile *[flag] <file>*

Viewfile allows you to view a file just as though you have first selected List & View from the Text menu, picked a file, and then clicked OK.

If you wanted to have the full List & View function from within AutoPilot, you would first run Selectfile, as follows:

```
thisfile = Selectfile "A:\" "*" "TXT" "Pick File To View"
Viewfile thisfile
```

Enter this as a program in a buffer (with Clear as the first command) and you can observe how it works by running from the Terminal.

Pretty easy, huh?

• • •

Wait *[flag] <secs><str>*

The ***Wait*** function will be the one most often used in AutoPilot logon scripts, since that's what you do while logging on: you wait for the other computer to signal you to enter information.

As with any function, Wait does not need to be assigned to a variable: you can just use it, as is.

```
Wait 30 "Name:"
```

will wait up to 30 seconds for the string "Name:" to appear. It if does, execution will continue at once. If the string does not appear, execution will continue after 30 seconds anyway.

Execution which continues anyway is no problem if you're there to interrupt the script. ***Press BOTH <S> keys and the <A> key at the SAME time to break out of an AutoPilot program.***

• • •

Terminal Keyboard Commands

Alphabetical Listing

<A> A	Answer Now
<A> B	Baud rates toggle
<A> C	Command shell
<A> D	Duplex toggle (half/full)
<A> E	Go To Editor
<A> F	Select font size
<A> G	Go Run Autopilot in current editor buffer
<A> H	Hangup (disconnect)
<A> J	Jump/Smooth scroll
<A> K	Keyboard Dial
<A> L	Line feeds on/off
<A> M	Terminal Emulation Mode
<A> O	Load Options
<A> P	Printer on/off
<A> Q	Quick List & View
<A> R	Receive File
<A> S	Send File
<A> T	Talk mode on/off (typeahead window)
<A> U	Utilities
<A> V	Vidtex functions
<A> W	Wrap end of line on/off
<A> X	EXIT ST-Talk Pro

<C><Help>	The 'More Help' Selector
<Undo>	Exit ST-Talk Pro
<C><ClrHome>	<BREAK> signal

Definable AutoPilot Function Keys:

<Fn>	Macro 1 thru 10
<S><Fn>	Macro 11 thru 20
<C><Fn>	Macro 21 thru 30
<A><Fn>	Macro 31 thru 40

Special VT-100/200 Keys:

<A><Enter> Toggle VT Keypad mode

With VT Keypad mode on:

[(]	VT PF1
[)]	VT PF2
[/]	VT PF3
[*]	VT PF4

With VT.FNK Loaded:

F1-F10	VT F1-F10
S>F1-F10	VT F11-F20

Terminal Keyboard Commands

Functional Listing

Answer

Answer Now	<A> A

Dial

Hangup (disconnect)	<A> H
Keyboard Dial	<A> K

File

Command shell	<A> C
Go Run Autopilot in current editor buffer	<A> G
Quick List & View	<A> Q
Receive File	<A> R
Send File	<A> S
Utilities	<A> U
EXIT ST-Talk Pro	<A> X or <Undo>

Function Keys

Definable AutoPilot Function Keys:

Macro 1 thru 10	<Fn>
Macro 11 thru 20	<S><Fn>
Macro 21 thru 30	<C><Fn>
Macro 31 thru 40	<A><Fn>

Help

'More Help' Selector	<C><Help>

Other

<BREAK> signal	<C><ClrH>

Select

Baud rates toggle	<A> B
Duplex toggle (half/full)	<A> D
Select font size	<A> F
Jump/Smooth scroll	<A> J
Line feeds on/off	<A> L
Terminal Emulation Mode	<A> M
Load Options	<A> O
Printer on/off	<A> P
Talk mode on/off (typeahead window)	<A> T
Vidtex functions	<A> V
Wrap end of line on/off	<A> W

Text

Go To Editor	<A> E

VT-100

Toggle VT Keypad mode	<A><Enter>

With VT Keypad mode on:

VT PF1	[(]
VT PF2	[)]
VT PF3	[/]
VT PF4	[*]
VT F1-F10	F1-F10
VT F11-F20	<S>F1-F10

Editor Keyboard Commands

Line Modification Functions

BACKSPACE
Deletes character to the left. If at column 1, merge line to end of previous line only if in insert mode.

DELETE
Deletes character to the right. Remainder of line is moved only in insert mode. If at end of line, next is merged to end of line only if in insert mode.

<S>BACKSPACE
Merges and reformat's paragraph if at column position 1.

<S>DELETE
Merges and reformats if at last position in line.

<C>DELETE
Deletes to End of line. Removes line if at beginning.

<C>CLR/HOME
Erase current line.

UNDO
Restores current line if changes were made.

INSERT
Toggle between Insert and Replace modes.

RETURN
Move to next line, insert blank line if in Insert mode.

Cursor Movement Functions

RtArrow
Cursor right, to next line if at end of a line.

LtArrow
Cursor left, to next line if at beginning of a line.

UpArrow
Cursor up to previous line.

DnArrow
Cursor down to next line.

<S>RtArrow
Cursor to end of current line.

<S>LtArrow
Cursor to beginning of current line.

<S>UpArrow
Cursor up to previous page (screen height - 2).

<S>DnArrow
Cursor down to next page (screen height - 2).

CLR/HOME
To ***Top of current buffer.***

<S>CLR/HOME
To ***Bottom of current buffer.***

Terms

<A>
<C>
<S>
AutoPilot
Dialog
Directory
Editor Buffer
Fn
GEM
Xmodem
Ymodem

Editor Keyboard Commands

Block Select Functions

ESC
Mark the ***start of an area*** to select (highlight) then again to mark the ***end of the area.*** Top and Bottom marks allowed in either order.

<A>ESC
Clear all selected areas (un-highlight selected text).

<S>ESC
Reverse selected (highlighted and normal are reversed).

<A>C
Copy selected areas to the current line position.

<A>M
Move selected areas to the current line position.

<A>P
Print selected areas.

<A>K
Kill (erase permanently!) the ***selected areas.***

<A>S
Save selected areas to disk.

<C>INSERT
Port (like Copy) ***selected*** areas to another buffer.

<Fn> ***Select buffer*** number 'n' (1 through 10).

<S><Fn>
Load buffer number 'n' (1 through 10).

<C><Fn> ***Macros 21 through 30.***

<A><Fn> ***Macros 31 through 40.***

Miscellaneous Functions

<A>A ***Allow control codes*** on/off

<A>E ***Exit Editor*** back to Terminal.

<A>F ***Find (search)*** for text string (from cursor to end of buffer).

<A>G ***Go to a line number.***

<A>L ***Load text from disk*** into current buffer.

<A>P ***Print buffer*** (all or selected).

<A>Q Quick ***List and View***

<A>R ***Search/Replace*** text with new text (from cursor to end of buffer).

<A>S ***Save current buffer*** to disk.

<A>U ***Text Upload*** Buffer

<A>W ***Word wrap*** on/off

<A>X ***EXIT ST-Talk Pro.***

<C>ESC Type an ***ASCII 'Esc'*** character.

<C><Help> The ***'More Help'*** Selector

Mouse Functions

Left button
One click inside of screen area ***positions cursor.*** Click and hold to ***select lines*** of text. ***Select buffer*** if clicked on buffer icon. ***Scroll one line*** if clicked on up/down arrows. ***Scroll one page*** if clicked on shaded area of slider bar. ***Scroll to location in buffer*** if dragging slider bar.

Right button
Go to Terminal mode if clicked in screen area. ***Load file*** into buffer if clicked on buffer icon.

AutoPilot Commands

The AutoPilot Language

The AutoPilot language is one of the most powerful features of ST-Talk Pro. Using the Editor, you may build a list of intructions to control just about everything you would normally do manually while online. These AutoPilot "script" files are much like BASIC programs with additional telecomm functions. Many of the AutoPilot commands, shown below, are for more experienced users; others are familiar to anyone who has done some casual programming. Either way, take a look at the sample AutoPilot files on your ST-Talk Pro disk to get some ideas. You may also want to review the AutoPilot Tutorial.

In the next section, you will find a sorted list of AutoPilot commands followed by a detailed dictionary. The dictionary won't tell you everything you need to learn about programming: the best way to learn how to use them is to look at the sample programs included on your distribution disk, and find other programs available on BBSs and on the information networks. With the power of programming avaiable through AutoPilot, you will find many programs available for your use and modification. Thanks to the readability of AutoPilot programs, you will quickly learn by observing what others have accomplished.

Help In Programming

While writing AutoPilot programs, you can turn on the AutoCheck feature in the Help Menu in the Editor. This will give you some error checking while typing in commands. Its best guess at the error will be printed on the right portion of the Editor's status line.

If you want to run the AutoPilot program to test it out, go from theEditor back to the Terminal screen and press <A>G (for Go AutoPilot). The text in the current Editor buffer will be interpreted as an AutoPilot program. If there's an error, go back to the Editor and the cursor will be on the line will the error occurred. If you put the AutoPilot command "Trace ON" (without the quotes) in the front of your program, you will be able to see the actual command echoed to the Terminal screen in lighter print, and in that see just what part of the program you are in. It's a good idea to put "Clear" as the first command, since otherwise you might find results of the previous run of the program interfering with the present attempt.

Data types and Conventions

AutoPilot has several kinds of data, or stored information. When you are creating a variable to hold information, how you format the data to be stored in that variable determines the "type" of that variable. This is called "type-casting" in the C programming language, is important when creating an array. First you "cast" the variable as a particular type (described below) and then extend the variable into an array with the Array command.

The data types contained in AutoPilot are described below:

number	signed, 2 dec point	1234.56
char	8 bit character	'A'
string	upto 255 length,	"abcde"
time	time value,	%11:12:13%
date	date value,	%01/02/88%
label	define using	_name
	and call with	goto name
function	define with	@name
	end with	@endsub
	call with just the	name

For arrays of above (except function):
1) define variable with dummy assignment to set type, such as:
names=""
2) Use array function to dimension it:
array names 10
3) Use [<val>] to access elements:
names[1]="John"
4) <val> may be an expression:
print names[x-1]

When writing AutoPilot commands, here are some conventions to follow. These are not required but will make your programs easier to read:

- Use lowercase for user defined variables.
- Use Upper/lower for system functions and user functions.
- Use ALL UPPER for controls like IF, ENDIF and GOTO.

Assignments and Arguments

In the ***AutoPilot Dictionary*** which follows, each term may have an assignment, a value assigned to a variable, and a number of arguments, values which the function must use in order to perform.

In the following statement,

goahead = Wait 30 "name:"

the AutoPilot command Wait is **assigned** to the variable goahead. It uses the **arguments** 30, a number, and "name:" a string.

The use of assignments is optional: the statement above could have been issued as

Wait 30 "name:"

and would have worked.

However, the command would NOT have worked without the arguments of 30 and "name:", because the function needs that information in order to act.

Dictionary Conventions

Each entry in the ***AutoPilot Dictionary*** may have one assignment, and any number of arguments. The assignment is indicated in square brackets [], while arguments are indicated in successive angle brackets <>.

Wait [flag] <num> <str>

indicates that the Wait function returns a flag, which means either a 0, which is equal to the False defined constant, or -1, equal to the True defined constant. It requires to arguments: a number and a string.

Data types are implied in the dictionary listings, and explained as necessary. Our decision was that it is better to have a meaningful abbreviation, such as <names>, and have to figure out that a string is required, than to have a very accurate and specific abbreviation, such as <str>, and then have to read the body of the definition to figure out what <str> represents. As in all matters involving matters of judgment, we follow a drummer with a beat which pleases us, and thus may see inconsistent at time.

There are a few conventions in notation worth mentioning.

<addr>	a number which corresponds to an address in memory
<char>	a single character
<date>	date
<flag>	a number which is either True (-1) or False (0)
<num>	number
<str>	string
<switch>	a number which is either On (-1) or Off (0)
<time>	time type

AutoPilot Commands

General I/O
Devstat
Erasebuf
Inputd
Printd

Console I/O
Input
Keyin
Keystat
Print
Inputd
Printd
VTDO

Constant
Off
True
{Append}
{Directory}
{Read}
{Readwrite}
{Write}

Data Handling
'getb
'getw
'getl
'storeb
'storew
'storel
Force
Address

File I/O
Close
Delete
Diskstat
Download
Getdrive
Getpath
Selectfile
Sendfile
Setdrive
Setpath
Point
Read
Savebuf
Loadbuf
Makedir
Note
Open
Upload
Viewfile
Write
{Append}
{Directory}
{Read}
{Readwrite}
{Write}
Inputd
Printd

Logic
#
&
<
<=
>
>=
?
And
Equals
False
IF
Not
Off
Or
True
=

Math
*
+
-
/
<<
>>
Equals
=

Modem
Answer
Baud
Capture
Connect
Dial
Flush
Hangup
Inputm
Modemin
Modemstat
Printm
Reply
Ringing
Sendbuf
Sendfile
Termtype
VTDO
Inputd
Printd

Printer
Printbuf
Printer
Printp
Printd

Program Flow
Abort
ELSE
ELSEIF
ENDIF
Goto
IF
Quit
Wait

Strings
Address
Midstr
Stradd
Strcomp
Strcopy
Strfind
Strsize

Syntax
;
@endsub
@xxxx
Clear
For
In
Is
Seconds
The
To
Trace
With

System
Getdate
Getrev
Gettime
Memstat
Run

Types
[
]
Array
Force
Unarray
Address

User Interface
Alert
Menu
Selectfile

AutoPilot Dictionary

*Logical NOT*
ex: notconnected = # Connect

& *Logical AND*

***** *Multiply*

+ *Add*

- *Subtract*

/ *Divide*

; *Multiple command seperator*
Used to seperate multiple commands on one line.
Note: Lines execute from right to left!
ex: x = 6
Print x; x = x + 1
This example will print 7 to the screen, because "x = x + 1" is performed first.

< *LESS THAN*

<< *LEFT SHIFT bit operation*

<= *LESS THAN OR EQUAL TO*

= *EQUALS or Assignment*

> *GREATER THAN*

>= *GREATER THAN OR EQUAL TO*

>> *RIGHT SHIFT bit operation*

? *Logical EXCLUSIVE OR*

@endsub
End a user-defined subroutine definition

@xxxx
Define xxxx
Start user defined subroutine called xxxx. Use xxxx to call a previously defined subroutine.

[
Start of Array index
ex:
waitlist[9] = "name:"

]
End of Array index

'getb [num] <addr>
Peek Memory, byte
Returns the byte value (0 - 255) contained at the specified memory address.

'getw [num] <addr>
Peek Memory, word
Returns the two-byte (0 - 64K) value starting at the memory address specified. Address must be even!

'getl <addr>
Peek Memory, long
Returns the four-byte value starting at the memory address specified. Address must be even!

'storeb [num] <addr><num>
Poke Memory, byte
Stores the one-byte value <num> into the address <addr>, returning the one-byte [num} which used to be there.

'storew [num] <addr><num>
Poke Memory, word

Stores the two-byte <num> into the address starting at <addr>, returning the two-byte [num] which use to be there. Address must be even!

'storel [num] <addr><num>

Poke Memory, long

Stores the four-byte value <num> in the address starting at <addr>, and returns the four-byte [num] that used to be there. Address must be even!

Abort

Same as Quit.

Address [addr] <str>|<array>

Address of String or Array

Returns the memory location of <str> or <array>; use for disk i/o, for example when reading and writing blocks. First allocate an array large enough to hold the block being read in, then find the address of the block, to use in the disk i/o routine. This is much faster than reading in one byte at a time.

Alert [num] <format>

GEM Alert Box Selector

where the <format> is as follows:

"[i][m1|m2|m3][b1|b2|b3]"

i is 0->4 for which style of icon.

0 = no icon
1 = "!"
2 = "?"
3 = <STOP>
4 = <Mr. "Oh yeah">

m1,m2,m3 are message text: you can include an string, or a variable set to a string.

b1,b2,b3 are button text: strings, or variables set to a string.

[num] returns which button was clicked (1->3): you will have as many

buttons as are indicated by the separators (|) used to separate the button text

ex:

```
message = "Choose Type Of Transfer"
b1 = "XMODEM"
b2 = "YMODEM"
b3 = "FMODEM"
whichxfer = Alert "[2][message][b1|b2|b3]"
```

See the AutoPilot demo file ALERT.AP for an example.

And

Logical AND

Same as the '&' command.

Answer

Enables modem

Sends "answer string" set in the Answer Options menu of the Terminal Select menu.

Array <var><size>

Define an Array

Allocates an array with <size> elements of the same type as variable <var>, which is then referenced by <var>. You first have to set the type of the variable. For strings, the Array function does not create the storage for the string data, but it does create a place to keep string locations. In other words, you will need to initialize each string element before you can print or copy data into it.

ex:

```
lastnames = ""              | creates a string with no length
Array lastnames 10          | creates a 10 element array of strings
lastnames[1] = "Fay"        | Makes the first string element "Fay"
lastnames[2] = "DeMar"      | Makes the second element "DeMar".
anyname = "Smith"           | Make a string variable holding "Smith"
lastnames[3] = anyname      | Third element is now "Smith".
```

Baud [num] <baud>

Sets baud to <baud>

returns the former baud rate in [num].

Capture [num] <bfr>

Controls Capturing

Turns capture OFF if <bfr> = 0, ON for buffer #<bfr> if <bfr> 1->10. On for old buffer if -1. Returns old buffer number in [num]. Capture 100 will return

the old buffer number without setting to a different buffer or state.

Clear
AutoPilot Reset
Resets everything. Use this at the start of all programs except for chaining programs with autopilot. This done automatically in Function Key Macros.

Close [flag] <num>
Closes Disk FIle
Closes file channel #<num>. Success of operation is shown in [flag].

Connect [flag]
Modem Status
Returns status of carrier detect in [flag].

Delete [flag] <fname>
Delete FIle
Deletes a file <fname>, with success shown in [flag].

Devin [flag] <dev>
Device Input
Inputs a chracter from a device, with success of operation returned in [flag].
dev 0 is keyboard
dev 1->4 are files (previously open),
dev=5 is modem

Devstat [flag] <dev>
Device Input Status
Status of an input device, with success of operation shown in [flag].

Dial [flag] <cnt><str>
Dial a Number
Dial number in <str>, <cnt> times, returning success of operation. If <str> is a phone number, it will dial it as is. If <str> is a name that matches the an entry in the AutoDial Directory, the actual phone number will be loaded from that entry.

Diskstat [free] <num>
Disk Free Space Status
Returns free space on disk <num> in [free]

Download [flag] <type><name>
Download a File
Downloads a file <name>, which is a string, using <type> of error protocol, and returning success in [flag].
1 for Checksum Xmodem
2 for CRC Xmodem
3 for Ymodem
4 for Fmodem
5 for CIS-QB (prints only <name> to modem as required)

Else
Use in IF...ELSE..ELSEIF...ENDIF statements.

Elseif <exp>
Use for multiple if's.
<exp> must be a logical expression, i.e., something which must be able to be tested whether it it True or False.
ex:

```
IF Connect
    Print "Connected to QMI~"
ELSEIF  %4/1/88% = getdate
    Print "April Fool's!"
ELSE
    Print "Sorry to break your heart!~"
ENDIF
```

ENDIF
Each IF must have its own ENDIF.

Equals
Same as =.

Erasebuf [oldbfr] <bfr>

Erase a Buffer

Erase buffer 1->10 (<bfr>), returning the previously selected buffer, <oldbfr>.

False

A constant, equal to 0

Makes reading AutoPilot programs easier.

Flush <num>

Clear the Modem Port

Remove text in RS-232 input buffer for <num> 60th of seconds. Mainly useful for flushing garbage characters which some systems send out during logon.

For

A "do nothing" filler word to aid in writing english-reading expressions.

Force <var><addr>

Force Address of Variable

Takes whatever is at the address <addr> and makes <var> located at that spot. Thus, Force does the opposite of Address. <var> must be created before being used by Force. A likely use would be when you wanted to print some information from the middle of a buffer, but didn't want to use MIDSTR to copy the character information to another string. By poking a 0 (with 'storeb) where you want to stop printing, you can create a string, Force it to the address where you want to start printing, and simply issue a Print command with that string.

Getdate [sysdate]

Get System Date

Returns the current date to a date variable.

Getdrive [asciival]

Returns the current default drive specification, in terms of the ASCII value of the letter of the drive: 65 = drive A, 66 = B, and so forth, or in ASCII characters if the variable to which it is assigned has already been "cast" as a character.

example:

```
clear
Setdrive 'A'      | Sets drive to A
driveval = Getdrive
Print driveval    | Prints 65 on screen: 65 is ASCII value of A

clear
driveval = 'x'    | Arbitrary value; any character would do
driveval = Getdrive
Print driveval    | Prints A on screen
```

Getpath [path] <drv>

Returns current path for drive <drv>, where <drv> is a number:

0 = currently selected drive

1 = A, 2 = B, etc.

Getrev [rev]

Returns revision number of ST-Talk Pro (2.nn).

Gettime [time]

Returns time to a time variable [time].

Goto <label>

Continue program at another location called 'label'. The label is declared with an underline attached to the first letter, and MUST start in the first column of text. It is called without the underline character. Example:

```
_loophere
        | program action placed in here |
If count < 10
   GOTO loophere
ENDIF
```

Hangup

Disconnect data-terminal-ready line momentarily, to hang up telephone line. Sends "Disconnect String" set in Dial Options if in Smart Mode, also set in the Dial Options dialog.

If <exp>

Start conditional statement using IF...ELSE...ELSEIF...ENDIF. Any level of 'nesting' is

permitted: you can put IF...ENDIF within IF...ENDIF, etc., so long as every IF has its own ENDIF.

In
Filler word for english-reading expressions.

Input [str] <cnt><sec>
Input from keyboard for <cnt> characters or <sec> seconds, which ever comes first. A negative <cnt> echoes characters to the screen while inputing. Returns string <str>.

Inputd [str] <dev><cnt><sec>
Input data from <dev> for <cnt> characters or <sec> seconds, whichever comes f rst. <dev> corresponds to the same devices as used by Devin and Printd. Returns a string [str].

Inputm [str] <cnt><sec>
Same as input but from the modem.

Is
Same as =.

Keyin [char]
Input a character from the keyboard. Useful for holding up the program until you want to continue.

Keystat [flag]
True for key waiting or False for none.

Loadbuf [flag] <bfr><file><mode>
Load bfr 1->10, from <file>, mode = 0 for erase, mode = 1 for merge, with [flag] relaying the success of the operation.

Makedir [flag] <fname>
Make a directory <fname> in the default drive, which can be set with Setdrive.

Memstat [amount]
Returns free ram size in [amount].

Menu <dev><keys><labels><strings>
Menu handler, see file MENU.AP for an example of usage.

<dev> is the device number: 0 = the keyboard, 5 = the modem.

<keys> is an array of type character, representing the keypresses which will activate the choices presented by the menu.

<labels> is an array of type labels (that's right: you can declare an array of labels), to which the menu will branch upon the corresponding keypress.

<msgs> is an array of strings containing the prompt to be associated with each of the menu items.

Midstr [str2] <str1><index><cnt>
Creates [str2] by make a string or <cnt> characters beginning from the <index>th character of <str1>. Combined with Strsize, you have the facilities for complete string manipulation.

Modemin [char]
Input one character from modem. Waits indefinitely if none is ready, use Modemstat first to make sure.

Modemstat [flag]
Status of characters coming from modem: True if coming, False if not.

Not
Same as #.

Note [loc] <num>
File seeking routine for advanced disk usage: stores the current file offset pointer (in bytes) into [loc] for opened file channel number <num>. [loc] is negative for errors.

Off/On
Constants for easier reading: the sdame as 0 and -1 in actuality.

Open [flag] <num><name><type>

Opens a file for disk i/o, especially read and write, which are very fast ways to read and write from a buffer directly to/from a file. An example of how to do so is given in the AutoPilot demo file FILELIST.TXT.

<num> is a number from 1 to 4: you can have up to four files open at one time, and they are numbered from 1 to 4. Why only 4? ??? That's just the way it is.

<name> is a string with the full path and name of the file to be used. You can use Selectfile to set the string, with the path attached.

<type> is one of following types:

{read}
{write}
{readwrite}
{append}
{directory}

Note that the above types of opening are typed as is:

```
ok = open 3 "a:\st_auto\filelist.txt" {read}
```

The *[flag]* returned indicates whether the file could indeed be opened sucessfully. Errors include (but may not be limited to) a) not finding the file, b) attempting to open a read-only file for writing or c) having 4 files already open. Use Close <num> after you are done with a file, to avoid the problem of having too many files open.

Or

Logical OR.

Point [flag] <num> <loc>

File seeking routine for advanced disk usage: <num> is an opened file channel, <loc> is the offset into the file (starts at 0, not 1). [flag] relays success, negative for errors.

Print [num] <exp>

Prints to screen, automatically converting the type of <exp> to ASCII.

Use the tilde character (~ next to the <backspace> key) to force a carriage return to the next line.

[num] is the number of characters that were printed. This is useful for fancier formatted output.

Printbuf [num] <bfr>

Print buffer <bfr>, returning the [num] of bytes actually printed.

Printd [num] <dev><exp>

Print <exp> to the <dev> referenced, returned the [num] of characters actually printed.

<dev> numbers are as follows:

0 = screen
1-4 = files opened by you
5 = modem

Printer [flag] <switch>

If switch is ON, printer echo is turned on; if OFF, it is turned off.

Return previous status in [flag]. Printer -100 returns stat without setting.

Printm [num] <exp>

Print <exp> to modem, returning the <num> of characters actually sent.

Printp [cnt] <exp>

Same as Printm, except to the printer.

Quit

Stops autopilot. Pressing the (ALT-SHIFT-SHIFT keys also will stop an AutoPilot program in midflight.

Read [num] <num><addr><cnt>

Block read and write from/to disk from the file which you have opened as [num]. <addr> is the address to which you want the data sent, while <cnt> is the maximum number of bytes you want read into that address. The number of bytes actually read is returned in [num]: if [num] = <cnt>, then the file may be larger than the buffer, alerting you for the need to work in segments on the file in question. If [num] is smaller than <cnt>, then the end of the file has been reached.

Reply [num] <exp>
Same as Printm.

Ringing [flag]
Returns status of ring detect. You can use this to set up your own dialback system, in which you detect a pattern of rings, and based on that pattern do a dialout to a predetermined number. This is the best kind of security, since no one, not even you, can dial into your computer.

Run [flag] <prg><args>
Runs external TOS/TTP/PRG program; runs AP if ".AP" extender is given, but does not return to the place in the AutoPilot program from which the call was made. In other words, you can chain from from AutoPilot program to another, but cannot call a program a return directly. You can, however, chain back to the original calling program. [flag] of course returns whether you were successful.

<prg> is a full path and filename of the program presented as a string, while **<args>** is a string with the arguments presented, for .TTP programs, and for those .PRG and .TOS programs which are written correctly to handle arguments.

Many programs which run from the Desktop allow arguments to be used from a command line, which this in effect is. Note how useful this can be when used in *AutoPilot Function Key Macros.*

Savebuf [flag] <bfr> <file> <mode>
Save <bfr> 1->10, to <file>, mode=0 for all, mode=1 for selected. [flag] returns success.

Seconds
Filler word for english-reading expressions.

Selectfile [fname] <path><file><ext><title>
ST-Talk GEM file selector. <path> is the directory specification, <file> is the filename or the * wildcard, <ext> is the extender or extender filter, and <title> is the title to be displayed in the fileselector.

[fname] is the concatenated path, filename, and extender, which can then be used to open the file using the Open command.

ex:
```
apfile = Selectfile "C:\ST_AUTO\" "" "AP" "AutoPilot Files"
```

See the example in the AutoPilot example FILESEL.AP. Use of the GMI Fileselector is covered in a Tutorial on that subject.

Sendbuf [flag] <bfr><mode>
Send buffer to modem, <mode> = 0 for all, 1 for selected. [flag] returns success of the send.

Sendfile [flag] <file>
Sends <file> to modem, returning [flag] regarding success.

Setdrive <newdrive>
Sets the drive to be used in operations which assume a drive, such as Makedir, and the drive used as a default drive, e.g., in Selectfile. <newdrive> is a character (newdrive = 'A'), but you can actually use the ASCII value of the character, if that is more convenient for programming purposes.

Setpath [errcode] <path>
Sets path to new pathname, returns error code: 0 if path was found, -34 if not.

Stradd [str3] <str1><str2>
Returns [str3] which is the concatenation (string addition) of <str2> to the end of <str1>.

ex:
```
oldstr = "ST-Talk "
newstr = stradd oldstr "Pro"
Print newstr    !Prints "ST-Talk Pro" on the screen.
```

Strcomp [flag] <str1><str2>
Compare strings, return TRUE if equal, FALSE if unequal.

Strcopy <from><to>
String copy the string <from> to the string <to>. If <from> is longer than <to>, be prepared for a surprise or two. As they say in the programming trade, "the result is indeterminate".

Strfind [pos] <sub><str>
Returns location [pos] or 0 if <sub> not found in <str>.

Strsize [cnt] <str>
Returns length of string. Same as LEN in Basic.

Termtype <num>
Set terminal emulation mode. 1 is VT-52, 2 is VT-100, etc.

The
Filler word for english-reading expressions.

To
Filler word for english-reading expressions

Trace <switch>
Show program lines being executed if <switch> is ON.

True
Constant for easier reading. Equal to -1.

Unarray <var>
Unallocates an array. This is useful if you've allocated an awfully large temporary array then want to free it up for other program usage. Old arrays are automatically "Unarray'ed" at the end of an AutoPilot program.

Upload [flag] <type><name>
Same parameters as download.

Viewfile [flag] <file>
View file, return [flag] regarding success.

VTDO <arg1><arg2><arg3><arg4>
Requires 4 arguments for internal video terminal operators: dependent on the system which you are accessing. Be careful using this internal function! See the VTDO.AP file for examples.

Wait [flag] <secs><str>
Wait for prompt in <str> to come from the modem. Returns False if <secs> has elapsed, returns True if <str> was seen first.

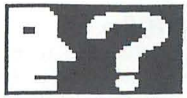
If <str> is an array of strings, the Wait function will return the index of the string it found. See the demo file MULTI.AP for an example of waiting for multiple prompts. This is an incredibly powerful feature.

With
Filler word for english-reading expressions.

Write [flag] <num><addr><cnt>
Writes to a disk channel [num] previously opened for <cnt> bytes, starting from <addr>.

{Append}
{Directory}
{Read}
{Readwrite}
and
{Write}
are all constants used with the Open command.

Beginner's Checklist



This Checklist is a hodge podge of things to know about operating your Atari ST. If you don't know these things, you are going to be a little lost in working with ST-Talk Pro or any other program which interacts heavily with the computer. With each item, we have included a short description of "how to do" -- if the short description doesn't jog your memory, we suggest you get any of the fine books describing the operation of the ST. You will have far less frustration if you follow our suggestion.

This list is not scientific: we included what seemed to us important paying attention to those points which were vexing for us when converting from other computers to the ST. If there are points we have missed, and which you think are important to know when operating ST-Talk Pro, let us know, in any of the ways described in the manual.

Disk Operations

1. Inserting a disk and starting the computer -- metal side goes in first, label goes up.

2. Write Protecting a disk -- open the little tab on top of the disk.

3. Formatting a disk -- darken Icon of Drive you want to use for formatting; drop down the File menu, Format... option.

4. Installing a Ramdisk -- get public domain accessory and take your chances; or better yet buy DeskCart and read the DeskCart manual.

5. Installing a Drive Icon --darken any of the Icons, drop Options menu, *Install Disk Drive...* command.

Disk Directories

1. Deleting folders -- delete files and folders inside folder; then drag folder to trash can.

2. Creating folders -- activate directory where Folder is desired; drop File menu on Desktop, New Folder... command.

3. Entering a Folder (Sub-directory) -- double-click on folder icon, or text line if viewing text.

4. Changing options on viewing a Disk Directory -- drop View menu on Desktop, click on option.

5. Opening a Disk Directory -- double-click on Drive Icon.

Mouse & Key Operations

1. Left Mouse vs. Right Mouse clicking.

2. Dragging with the mouse -- position mouse, hold click down while moving mouse.

3. Use of Control and Alternate Keys -- just like a second and third shift key: allows more combinations of keys.

Beginner's Checklist

4. Clicking, darkening (also called lighting), and double-clicking -- can reset speed for double-click in Control Panel; or better yet through QMI's DeskCart Control Panel accessory.

Desktop & Menu Operations

1. Resetting a Disk Directory (Esc key) -- if more than one open Drive, make Drive active and press Esc key.

2. Deleting single and multiple files -- darken files as per copying; drag to trash can.

3. Closing a Disk Directory -- click on Close button (upper left) to move one level up.

4. Fulling and Defulling a Disk Directory -- click on Full button (upper right) to toggle Full/Previous.

5. Making Drive Directory Window active -- if more than one drive, single click on inactive Window.

6. Using the Dropdown menus -- move mouse over word at top of screen.

7. Putting an Accessory on a disk -- copy .ACC file to main directory.

Disk & File Copying

1. Disk copying (single-disk users: use a full-disk copier) -- follow docs which come with copier; a public domain copier is on your ST-Talk Pro disk.

2. Multiple file copying -- drag mouse upper left to lower right with icons, top to bottom with text; toggle select by holding down Shift key while clicking with mouse; drag to where you want it copied.

3. Disk to Ramdisk or Hard Drive copying -- open Ramdisk or Hard Drive to directory where you want to copy disk; drag disk to open directory.

4. Ramdisk to Disk copying -- open Disk to directory desired; drag Ramdisk to open directory.

Miscellaneous

1. Hook Up Your Modem -- most modems use a standard IBM-style connector cable.

2. Using an Accessory from within a program -- drop the Desk menu, choose an accessory.

3. Default Option entry (Return key) -- OK (or other named) box with darker edges: Return key is same as clicking on that item.

4. Entering and editing GEM text fields -- UpArrow and DownArrow, Tab & Return keys to move from field to field; -- LeftArrow and RightArrow, Backspace & Delete keys to modify; -- Esc key to blank entire field.

The QMI Fileselector

The ***QMI Fileselector*** is used in place of the Fileselector provided with The Operating System (TOS), in order to make file access as uncomplicated as possible. The parts of the Fileselector you need to identify are:

- the ***Filename Field*** (where you type in the name);
- the scrolling ***Filename List***;
- the ***Title Bar*** above the scrolling list;
- the ***Exit Button,*** to the left of the Title Bar;
- the ***Scroll Bar,*** Arrows, and Area to the right of the scrolling list;
- the ***Drive Selector Buttons*** on the bottom of the Fileselector;
- and the ***SORT, CANCEL,*** and ***OK*** buttons along the bottom.

Selecting a filename typically involves the following operations. If you go to the editor and select on of the Editor buffer icons with your Right Mouse Button (<RM> on Buffer Icon), you can actually do all of these steps and see for yourself. Having a disk or hard drive with many files and directories will best show you the features being described.

1) Selecting a Drive

Choose the Drive you wish to use, by clicking on the letter. Only active drives will have dark letters. If you forgot to activate your Ramdisk, you will see that is disabled (showing a grey letter). B drive will always be active, because TOS allows you to pretend there is a B drive even when you haven't got an extra floppy drive hooked up. Switching drives does not, as it does in TOS, automatically remove whatever filename happens to be inserted in the filename field.

2) Selecting the File Type

(Optional) ***Set the extender (file type) of the filenames you wish to view.*** This makes long lists more manageable.

a) First, ***clear the name field,*** by typing Esc.

b) Next, ***move to the suffix field*** by typing a period.

c) ***Type the extender*** you wish to match, using **?** and * wildcards:

- **?** stands for any letter occupying the same column or position within the field;
- * stand for an letter or combination of letters from that column in the field to the end of the field. An extender of A* will select files with .ARC and .AP extenders, for example.

d) ***Reset the Fileselector by clicking on the drive letter*** or on the grey title bar directly above the scrolling list of filenames. This is different than TOS, where you must take great care to click on the white space directly below the title bar and above the first filename in the list.

3) Sorting the File List

(Optional) ***Re-sort the list by clicking on the SORT button.*** You will be given the choice of clicking on ***NAME, SIZE or DATE*** buttons, which will sort as their names imply. Remember, this is the QMI FormAlert, and you can use the first letter of the choice if you don't want to reach for your mouse.

4) Navigate through folders

Move into folders by clicking on the folder name in the scrolling list.

Move out of folders by:

- ***using the exit button*** on the left of the title bar area of the scrolling filename list;

or • ***click on "to top directory"*** to move to the top, or root directory;

or • ***"exit this directory"*** does exactly the same as the exit button.

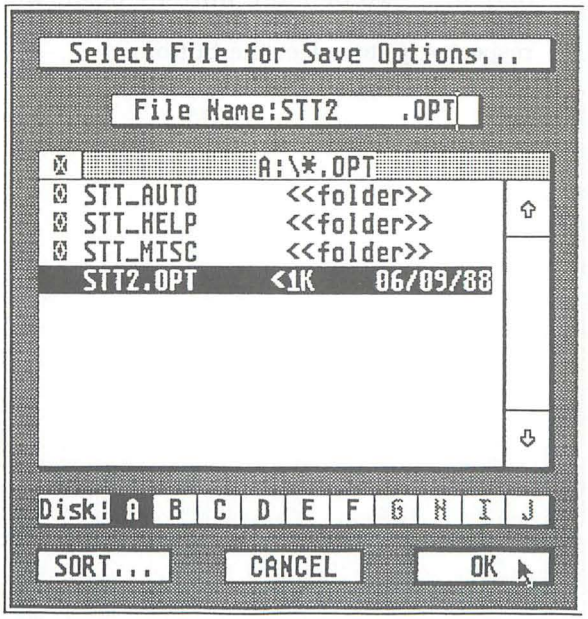
5) Exiting the FileSelector

Exit the QMI FileSelector by:

- ***Clicking on CANCEL*** if you want to do nothing;

or • ***Clicking on OK*** if you've inserted a filename and want to choose the path and name selected.

or • ***Double-clicking on a name*** in the filename list currently displayed.

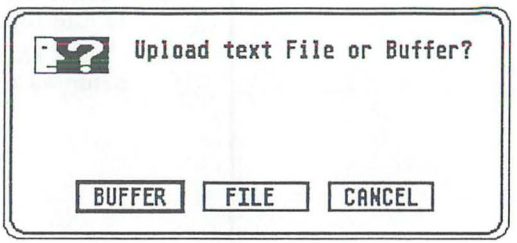


The QMI FormAlert

A ***FormAlert*** is a little box which typically has a title, a command/question, and which then presents you with one or more buttons to click, in response to the command or question. By convention you can select the default choice, which is typically more heavily outlined, by pressing the Return key.

The QMI FormAlert allows you to select any of the choices offered by typing the first letter of the choice. If the choices are NAME, SIZE, and DATE, as they are when the SORT... button of the QMI Fileselector is chosen, typing S or s will pick the SIZE option. If two or more buttons begin with the same letter, use the 1,2 and 3 keys, respectively, to select the buttons.

The QMI FormAlert has little pictures in it, too. The level of importance of the command corresponds with the type of icon shown in the FormAlert. If the command is very important, an exclamation point (!) appears; if the question must be answered to continue, a stop sign is shown; and common questions are presented with a question mark (?) icon.



ASCII Table

000	<C>@	NUL
001	<C>A	SOH
002	<C>B	STX
003	<C>C	ETX
004	<C>D	EOT
005	<C>E	ENQ
006	<C>F	ACK
007	<C>G	BEL
008	<C>H	BS
009	<C>I	HT
010	<C>J	LF
011	<C>K	VT
012	<C>L	FF
013	<C>M	CR
014	<C>N	SO
015	<C>O	SO
016	<C>P	DLE
017	<C>Q	DC1
018	<C>R	DC2
019	<C>S	DC3
020	<C>T	DC4
021	<C>U	NAK
022	<C>V	SYN
023	<C>W	ETB
024	<C>X	CAN
025	<C>Y	EM
026	<C>Z	SUB
027	<C>[	ESC
028	<C>\	FS
029	<C>]	GS
030	<C>^	RS
031	<C>_	US

032	SPACE	
033	!	excl. point
034	"	dbl quote
035	#	number
036	$	dollars
037	%	percent
038	&	ampersand
039	'	sgl. quote
040	(	Lparenth.
041	)	Rparenth.
042	*	asterisk
043	+	plus
044	,	comma
045	-	minus
046	.	period
047	/	slash
048	0	
049	1	N
050	2	U
051	3	M
052	4	E
053	5	R
054	6	A
055	7	L
056	8	S
057	9	
058	:	colon
059	;	semicolon
060	<	lessthan
061	=	equal
062	>	greater
063	?	question

064	@	
065	A	C
066	B	A
067	C	P
068	D	I
069	E	T
070	F	A
071	G	L
072	H	
073	I	
074	J	L
075	K	E
076	L	T
077	M	T
078	N	E
079	O	R
080	P	S
081	Q	
082	R	
083	S	
084	T	
085	U	
086	V	
087	W	
088	X	
089	Y	
090	Z	
091	[	Lbracket
092	\	Backslash
093	]	Rbracket
094	^	caret
095	_	uscore

096	'	apostrophe
097	a	L
098	b	O
099	c	W
100	d	E
101	e	R
102	f	C
103	g	A
104	h	S
105	i	E
106	j	
107	k	
108	l	L
109	m	E
110	n	T
111	o	T
112	p	E
113	q	R
114	r	S
115	s	
116	t	
117	u	
118	v	
119	w	
120	x	
121	y	
122	z	
123	{	Lbrace
124	|	OR bar
125	}	Rbrace
126	~	tilde
127	DEL	Delete

<C> = Control Key

.RSC File
a resource file, which contains specifications for the parts of the program which get drawn on the screen. It is loaded automatically when the program loads, provided it has been put on the same directory as the program. ST-Talk Professional has two .RSC files, one for monochrome systems and the other for color systems. ST-TALK2.RSC is for mono; ST-TALK2C.RSC is for color.

.TTP Program
the letters stand for TOS Takes Parameters. When you click on such a program from the Desktop, a box comes up asking you to fill in the parameter. A parameter might be a command letter or string, a name of a file, or the name of a path. When you perform an archiving function from within ST-Talk Pro, we run ARC.TTP for you, and fill in the parameters based on your choices from the QMI Fileselector.

<A>
means hold down the Alternate key while you type the key which comes right after this symbol.

<C>
means hold down the Control key while you type the key which comes right after this symbol.

<Esc>
a symbol sometimes used to signify the Escape key.

<LM>
see Left Mouse Button

<RM>
see Right Mouse Button

<S>
means old down the Shift key while you type the key which comes right after this symbol.

ARC.TTP
a public domain program for performing archiving functions. See Archiving Functions under the Terminal File Menu.

ASCII
computers know numbers, not letters. The ASCII character set is an agreed upon set of letters which correspond to numbers. The letter A is 65, a blank space is 32, and so forth. Most computers use the ASCII character set, but a few don't (e.g., the 8-bit Atari and Commodore computers use variations of the ASCII character set).

ASCII Upload
(or ASCII download for that matter) is when you are sending a buffer or file of text without error-checking.

Accessory
a program which you can access from within any GEM program (under the Desk dropdown menu). They have .ACC extenders, and must appear on the main directory of the drive from which you boot your computer ('A' drive unless you have a hard drive, in which case it's the 'C' drive).

Alternate Keys
a key typed while holding down the Alternate key, and thus the same as <A>.

AutoCheck
a syntax checker for your AutoPilot programs. A syntax checker tries to prevent you from making forgetful mistakes, like not specifying the length of time in a Wait command.

AutoPilot
the programming language which allows you to automate ST-Talk Professional, depending on your programming ability, or your ability to find others who will share their ability with you (try QMI BBS, GEnie or Compuserve).

BBS
Bulletin Board Service. You call with your computer and talk with a program on someone

else's computer. Once there, you can read messages posted on various topics (hence the term Bulletin Board) or leave private messages (Email) for a particular person. Some BBS's have public domain programs which you can download.

Background
With multi-tasking, your computer can do more than one thing at the same time. The foreground task is the one you notice, up front. The background task occurs without your noticing much of it. The Background Downloader Accessory for ST-Talk Professional allows you to download while engaging in other tasks, such as editing or even running another program from within ST-Talk Pro. You receive your background downloader by sending in your registration and $3, or your registration, original disk, and $2.

Battery-backed Up Clock
the ST doesn't have a clock built into it, so that if you want your programs to know the time you have to set it. A battery-backed up clock, such as the one in QMI's DeskCart Accessory Cartridge, takes over this task for you.

Baud
the rate of transmission over a modem. 1200 is pretty standard now, with 2400 becoming the new standard. The term 'baud' derives from the name of Emile Baudot, who figured out a way for telegraph companies to put five signals on one line.

Baud Rate
see Baud; Baud is the unit of measurement.

Break
a signal from one computer to the other to stop things in their tracks. It used to actually be a break in the electrical current. In ST Talk Pro <C>Clr/Home produces a Break signal. This is handy for certain services which don't allow you to assign a Break Key substitute (GEnie & CompuServe do, through their setup options; on QMI BBS use <C>C).

Buffer
a place where text is stored in the program's memory.

Button
a small box with a label in it upon which you click with the mouse. When a box is outlined more heavily than the others, you can use the Return key to perform the same action.

<C>
means hold down the Control key while you type the key which comes right after this symbol.

Capture
Used typically as "Capture ON" or "Capture OFF". To capture text means that what occurs through the modem, going both in and out, is placed in a buffer (a place where text is stored).

Carrier Detect
see CD.

CD
Carrier Detect. Carrier is the tone sent by your modem which "carries" the information. Carrier Detect means that another modem has been detected over the telephone line. There's often an LED on the front of your modem which lights up when a Carrier is detected.

Character
when I type a letter on the screen, I have typed a character. Characters consist of numbers, letters, punctuation, and symbols.

CIS-QB
a file transfer protocol used by CompuServe, also called "Quick B", since it is the "quick" form of their B transfer protocol. In it,

you supply a file name to them, including a path, and the file transfer facility built-in to ST-Talk Pro creates the filename on your computer, and handles the entire transfer. You can type the path and name (C:\UTILITIES\DISKMAN.ARC would download a file called DISKMAN.ARC from CompuServe into the UTILTIES folder on your C drive); or you can set it within the Receive File Dialog, and click on CIS-QB protocol, and the path and name will be sent out the modem for you.

Close Button

(as in to 'close' a door) in the top left of a GEM window is an oval with an X through it. When you click on it, you typically perform the same program action as if you had issued a QUIT command.

Command Line

in GEM, you perform actions on the Desktop by clicking either on names or icons. In the IBM-compatible DOS world, you type commands in what is called a Command Line. There are programs for the ST, such as QMI's DO-IT! which allow you to work from a Command Line. There are some tricks, such as the use of wildcards, which are easier to do from a Command Line than from the Desktop.

Command Shell

a Command Shell is a program from which you can issue commands to the system in a manner different than the Desktop. QMI's DO-IT!, which gives the ST a DOS-like Command Line, is a Command Shell. There are Command Shells which do not use Command Lines also.

Compile

when programming in many popular languages, you have to first write the code, and then go through an entirely separate step called compiling, where what you wrote is translated into something more understandable by the computer. It's a help when you are doing that to be able to run your compiler from your editor, so that you can return to editing when you find where you made your mistakes. ST-Talk Pro allows you to do that by using Run A Program... Or, if you really want to make life easy, you can define a Function Key Macro to run an AutoPilot program which runs your compiler.

CompuServe

a national information network through which you can access information about, and public domain programs for, your ST. In addition, there are many other information services available, including shopping and airline schedules. You dial in to a local number and are connected by a data network to CompuServe's computers.

Control Code

an ASCII code produced by pressing a key while holding down the Control Key. If you take the ASCII value of the key and subtract 64, you will have the ASCII value of the control code. When you toggle Control Codes on in the Options Menu, you can type control codes and see the result as greyed versions of the letters that would appear if the Control Key were not being depressed.

Control Key

the key to the left of the A on the ST keyboard. Think of it as yet another Shift key, which allows you to make a particular key produce a different result.

Control Panel

the GEM Desktop, which you see when you turn on the computer, has Accessories which can be selected from the Desk Menu. One of these accesssories, which comes with the computer, is call CONTROL.ACC (a new version, as of about 12/87, is available on GEnie and various other BBSs). The Control Panel allows you to set the colors on

your screen (or reverse, if you are in monochrome), the time, the rate of double-clicking, or the rate of cursor repeats. By the way: it doesn't do any good to save your settings from CONTROL.ACC using Save Desktop, unless you boot with CONTROL.ACC every time (although there is a public domain accessory available which takes the place of CONTROL.ACC and resets it for you, but you get the point: Save Desktop alone won't do it for you). GMI's DeskCart has a control panel in it also, with provision to save the control panel settings.

CR

Carriage Return. A CR has an ASCII value of 13, and moves the cursor to the leftmost part of the screen, or the printer head to the left of the carriage (hence the derivation of the term).

Criteria

when performing a Search operation in the Editor's Edit Menu, you have to specify search criteria: what is being looked for. When you are using GMI's Fileselector, you can specify extender (suffix) criteria, including wildcards, which will be used to select files for display.

CR/LF

Carriage Return/Linefeed combination. To move the cursor on the ST to the beginning of the next line, you need to return it to the left of the screen (CR) and move it down a line (LF).

Cursor

in ST-Talk Pro, the rectangular block which marks where the next letter will be typed. If you can't see the letter beneath the cursor while in color, that's because you have your 2nd and 3rd colors set for the same color in the Control Panel. We reset them to a blue cursor with red letter underneath, but if you were to change the settings with some accessory (the Atari Control Panel or GMI's DeskCart, for example) you might accidently make things disappear.

Darken

Icons, such as the depictions of the drives on the Desktop or the symbols on the right of the ST-Talk Pro Windows, reverse colors, usually from light to dark, when clicked on. Sometimes they bounce back, sometimes they stick. Sometimes you will read or hear the phrase "darken the Capture Icon" or "highlight the filename" or "select the Capture Icon."

Database

a collection of information; also, the system for inputting, organizing, and outputting the information. A mailing list system is a simple form of database. ST-Talk Pro has a built- in set of functions which allows you to write your own database, possibly to be accessed through a computer which dials yours.

Decimal

refers to the base-10 number system, that is, the one that we use in everyday arithmetic. Computers are most easily talked to in the base 16 or base 2 number systems. When you are filling in printer initialization strings under the terminal Select Menu, printer options, you have the choice of entering non-character codes in either hexidecimal or decimal. To enter them in decimal, simply type the upbar (the key to the right of the return key, shifted), the number, and a following upbar. If you want to use hexidecimal, which some printer manuals use without giving you the decimal equivalent, type a dollar sign ($) before the number: |$1B| is a decimal 27 which is an ASCII Escape. Note that in the ST-Talk Pro Editor you could simpley put Control Codes ON in the Options Menu and type <Esc>. In a GEM dialog text field, you

can type <C>[, which is also an ASCII 27.

Default

The Default value is that value which will occur if you do nothing to change the value that's already there. ST- Talk Pro has Default values that allow you to simply copy the distribution disk and run the program if you are operating from a single-drive system. The only problem you might run into is if you are operating with a 520K system, in which case you might have to disable some accessories in order to have room for everything. If you have a one meg system, you can increase the size of the Editor buffers using the Re-initialization option under the Editor Options Menu, and then Save Options in order to make that change permanent.

Desktop

The program which runs when you first boot your ST computer. It has the icons of the disk drives and the trashcan for erasing files. If you aren't sure what the Desktop is, be sure to review the Computer Beginner's Checklist in the Appendix section of this manual.

Dialog

A Dialog is a form which appears on the screen allowing you to interact with the program by clicking on buttons, entering text in fields, or sliding bars. In a sense, the Dialog allows you to communicate (Dialogue) with the program.

Directory

A place where files are stored, and also where other directories can exist. The "root" or main directory is the one you see when you double click on a drive icon from the Desktop. It is a directory which does not reside within any other directory.

Distribution Disk

This is the one that your program came on. Save it as you'll need it when sending in for updates.

Double-click

This means clicking twice quickly with your left mouse button. You can set the quickness required for a double click through the Control Panel (either the one that came with your computer or GMI's DeskCart). A double click is usually used to start a program or show a file from the Desktop.

Download

to transfer a file from another computer to your computer. There are various kinds of downloads, with or without error checking. Error checking is necessary when downloading a program, but not necessary (only desirable) when downloading a textfile.

Dropdown Menu

when you move the mouse across the Menu Bar, menus drop down one after the other. These are called Dropdown Menus. In ST-Talk Pro, the Dropdown Menu bars themselves change when switching from the Terminal to the Editor and some of the Dropdown Menu items actually change, depending upon what has been going on in the program. For example, if you begin to select a portion of text in the Editor (using Esc or clicking on Begin Select in the Select Menu) you will notice that "Begin Select" is changed to "End Select" in the Select Menu.

Duplex

technically this refers to whether two signals (full duplex) or one signal (half duplex) can be sent on the same line at the same time. Occasionally on some of the long distance phone services you might be sent over a satellite which can only handle half-duplex transmission: you will notice that when one of you talks, the other can't be heard. Your modem ALWAYS transmits full duplex; when ST-Talk Pro is

switched to half-duplex mode, it writes each letter you type on the screen. In full duplex, each letter is echoed by the other computer; so that the key you press and then see appear on your screen has actually made a roundtrip. Technically this is known as "echoplex", but over the years has come to be known as full duplex. Half duplex can be toggled by <A>D or reached through the Options Icon. When typing on GEnie, you may find that half duplex is much smoother, because their echo can be somewhat slow in coming back and make the screen appear sluggish. If you want GEnie to use full duplex, type <C>R before you type ANYTHING else, but after the ID prompt is given.

Echo

Ordinarily when you are talking directly to another computer, you are not giving them an echo of what they are sending to you. If you were a bulletin board service (BBS), you would ordinarily need to provide an echo, and so ST-Talk Pro gives you this capability [Options Icon; or the RS-232 Options item from the Terminal Select menu].

Editor Buffer

The Editor Buffer is accurately named the "current Editor Buffer", meaning the one which is currently selected by the Editor (whether you are in the Editor or not). There are really only 10 user-accessible buffers in ST-Talk Pro (we aren't telling you about the eleventh buffer which is used to run AutoPilot programs internally). When you run an AutoPilot program from a buffer using the <A>G command, or through the dial or answer Menu items, you are running the program from the currently selected Editor Buffer. This is not the buffer number which appears in the left most box on the Terminal Status Line, at the bottom of the Terminal window; it is the number which appears in a similar place on the Editor status line, and is the buffer corresponding to the Editor "Book" Icon which is darkened.

Editor Mode

ST-Talk Pro has two modes: Terminal Mode and Editor Mode. Each of these has a separate Menu bar. Rather than using the word "Mode" a thousand times in the manual, we simply refer to being "in the Terminal" or being "in the Editor".

Elite

Refers to type which is 12 characters to the inch rather than a normal 10 characters to the inch (pica).

Emulation

Is used in conjunction with the ability of a terminal program to echo or emulate a standardized method of controlling screen display, usually associated with specialized terminals connected to mainframes. The Mode Icon in the Terminal brings up a Dialog allowing you to select Terminal Emulation Mode.

Epson Compatible

Epson was the first on the block with a comprehensive series of commands controlling printer output, and so the other manufacturers followed along. Other printer manufacturers will now designate their printers as being "Epson compatible", so that people will know that the new printer will work with the old program.

Esc

These are the letters on the Escape key, the leftmost key on the upper row of character keys (as opposed to Function Keys above them). The Escape key does not normally put a symbol on the screen (unless there is some special programming being done for some specific purpose). The Escape character is normally used as part of either screen or printer control, with the Escape character recognized by the program as signaling that special control parameters are

about to appear. In the Editor, with Control Codes ON in the Options Menu, <C>[will produce an Escape key (because the ASCII Esc character has a value of 27; the [character by itself has a value of 91; and control characters have a value of the original character less 64). In Terminal Mode, typing the <Esc> key will produce an escape code. This is handy in resetting cursor color ("<esc>b1" does the trick, in any of the VT- emulation modes), when the sending computer has set your color and not reset it at the end of your session.

Extender

The three letters which follow the period n a file name (although there is no reason why the three letters have to be used in which case there would not be three visible letters following the file name). This is also called the file "suffix." By convention, files which are straight ASCII are labeled .TXT or .ASC Files, while files written in First Word or WordWriter are indicated with .DOC. To confuse matters, there are programs (such as Publishing Partner, used for desktop publishing), which also use .DOC files, but are not in the same format, and will not do anything intelligent when read into ST-Talk Pro. When using a Fileselector and typing in filename, typing the period will move the cursor to the character just to the right of the period. Program files are labeled .PRG (a GEM program), .TOS, or .TTP (TOS takes parameters: a form comes up allowing you to type in material which the program will use when it loads). When using a Fileselector, you can specify the extender and then reset the Fileselector to see only those files with the named extender. Wildcards can be used when describing the extender to be sought. The QMI Fileselector resets by clicking on the Drive button or the Title bar directly above the scrolled list of files. To reset the GEM Fileselector to a new suffix or filename pattern, you must click on the white space below the Title bar and above the first name in the scroll list, after you have indicated the new pattern.

<Esc>

a symbol sometimes used to signify the Escape key.

Field

In a dialog there will be places where text can be entered: this is called the field. There are text fields, date fields, time fields, money fields and number fields. GEM makes you fill in each character in a date or a number field, even if the number is a zero. Thus, the month of September must be typed "09" in a GEM date field.

File

information stored on a disk, whether it is a floppy disk, hard disk, or RAM disk. Files have names consisting of a file name of up to eight characters, followed by a period, and then concluded with an extender, which can have up to three letters. A file is contained in a directory. Furthermore, a directory can be contained within a directory. The full information about where a file is contained is called a path: it consists of the drive, followed by the directories on that drive through which one must travel in order to reach the file. A:\STTALK2\ST_AUTO\DIAL.DBF means that file DIAL.DBF resides in the ST-AUTO directory, which in turn resides in the STTALK2 directory, which in turn resides on the A drive.

Flow Control

When information is being transmitted automatically from one computer to another, there has to be some way of handling the inevitable slowdowns or interruptions. The general term for this method of handling the need to temporarily halt and then restart transmission is called Flow Control. On many

computer systems <C>S signals the other computer to stop; <C>Q signals the other computer to restart; and <C>X signals the other computer to abort the transmission. For Text Upload, you can select from one of two methods of Flow Control: XON/XOFF or Prompt, in which you specify a prompt string for which to wait before transmitting the next line. You can control Flow at the level of the actual transmission between computer and modem through the XON/XOFF toggle in the RS-232 Options item of the Terminal Select Menu. If the XON/XOFF toggle is set ON, the computer will send an XOFF signal whenever the mouse goes into the menubar; this is important, since the computer under GEM is unable to process input and output when a menu has been selected.

Fn

The small n stands for the number of the associated Function Key, from the 10 Function Keys which reside above the top of the keyboard on the ST. Function Key macros are set from within the Terminals Select Menu, with each key able to run a 10 line AutoPilot program. Since an AutoPilot program can call another AutoPilot program, you are able to gain virtually unlimited control of your computer through Function Keys, if that's what you would really like to do. The Function Keys which come pre-done for you do the following: F1 toggles Capture ON and OFF; F2 uploads file using straight or ASCII upload; F3 starts the Xmodem receive sequence; F4 starts the Xmodem send sequence. <A>F4 is a sample AutoPilot program which says "hello" on the screen.

Folder

A Folder is a directory which exists within another directory. They are represented on the GEM Desktop as File Folders, hence the name Folder.

Font

A Font is another term for a particular style of type face. In ST-Talk Pro it refers to the .FNT File which defines the current Font used to display letters on the screen. There is a default Font present within ST-Talk Pro. You can design your own Font using the F.E.D Font Editor, which is in the Public Domain and available on the national information networks which have ST sections, and also on many BBSs.

FormAlert

Within a GEM program you will often see a form appear which has two or three choices to click on, but with no fields to input other types of information. This is called a FormAlert. You can design your own FormAlert to be used within AutoPilot. The general form of the FormAlert is given in the AutoPilot commands section of the manual. The AutoPilot Tutorial shows the use of the alert function on Page 75.

Full-duplex

See Duplex; toggle it from the Keyboard with <A>D. If you are typing and not seeing what you are typing on the screen (and you are certain you are really connected to the other computer), then it might be that the other computer is not sending an Echo and you need to switch to Half-duplex. The state you are in is reflected in the middle section of the Terminal Status Line, along with the Baud rate. On GEnie, type <C>R before typing in your account number to make GEnie answer in Full Duplex.

Function Key

See also Fn. The functions associated with Function Keys are entirely arbitrary and are designed by you programmer, and are not inherent to the computer. The Function Key macros allow you to run short AutoPilot programs which are

set up through the Terminal Select Menu, Function Key item.

GEM

Stands for Graphics Environment Manager. GEM is built into the ST, so that no extra memory in the computer is used when you are using it. GEM is available on the PC also, but takes up space in the available memory when used there.

GEnie

stands for the General Electric Network for Information Exchange. As with CompuServe, you dial a local number and are hooked in through a data network to GEnie's computers. GEnie has sections for Atari Computers and Atari Developers.

Half-duplex

See also Duplex. If you see two letters for every one you type, its probably the case that you are in Half- duplex (look in the middle of the Status Line and find out, next to the numbers that stand for Baud Rate), and the other computer is also giving you an Echo. If you switch to Full-duplex by pressing <A>D, that may well solve your problem.

Hexadecimal

See also Decimal. Hex stands for six; Hexidecimal means the base 16 (10 + 6) number system. Microcomputers are arranged in 8-bit section called bytes. There are 256 combinations available in 8 bits: it would be like laying 8 pennies in a row on a table, in which case you would have 256 possible combinations of heads and tails. It just so happens that 16 x 16 = 256, which means that in two Hexadecimal characters one can represent all 256 possibilities.

Highlight

when an icon or a text item is darkened in GEM (or lightened if you are using reverse video). Typically this is done with a single click of the left mouse, although so called "hot" items will darken (or highlight as the case might be) as you move the mouse over them. Some items will stay darkened when using a single click on them (so called "sticky" items); others will darken when a mouse passes over them ("hot" items).

Icon

The pictures on the right of the ST-Talk Pro screen and the pictures of the drives of the TrashCan on the Desktop are Icons. The Icons on the Desktop can be moved around; those within ST-Talk Pro cannot. Notice that the names in the ST-Talk Pro Icons often change, reflecting information relevant to the program function with which they are associated. For example, the Capture Icon which appears to the right while in the Terminal, says either OFF or ON reflecting the state of the Capture Text function. In the Editor, the 10 Buffer Icons show the first 8 letters of the filename which is associated with each particular buffer.

Information Network

GEnie, CompuServe, BIX, and others are called Information Networks, since they allow information to be sent and received from many different locations. Each of the Information Networks has different characteristics, for example ease-of-use versus depth of material versus availability of downloads versus commitment of the parent organization to the ST, which you will want to explore. At 2400 baud they all cost about the same.

Initialization

When a program is first run, there are many different settings which might be set one way or the other, depending upon personal preferences or needs. This process of initially setting preferences is called Initialization. The file STT2.OPT contains the default settings for

ST-Talk Pro. This file must be placed on the same directory as ST-TALK2.PRG. In addition, STT2.PTH, also on the same directory as the program, contains the settings from the Set Paths command. STT2.MNU contains the Menu settings for the drop-down dial Menu. Finally, STT2.FNK contains the default settings set on initialization for the Function Key Macros. All these files must be on the same directory as the program. They are all loaded automatically when the program boots.

Initialize

To engage in the process of initialization.

K

is a unit of measurement of a number of Bytes, and refers to the number 1,024 is used, in contrast to an even 1,000. Because 1,024 is a power of 2, and since computers really only think in terms of the numbers 1 and 0, the base 2 number system (which only has the numbers 1 and 0) is a handy foundation for later calculations. Computer programmers often write in Hexadecimal: 16 is a power of 2, so that certain limits and boundaries within the computer often fall on what in Hexadecimal are numeric boundaries. In other words, it's easier to remember 36K than to remember 36,864, etc.

Kermit

Kermit is a protocol for sending and receiving files. It incorporates batch (more than one file at once) facilities and sophisticated error checking. It is most often used when communicating with a mainframe computer, typically at a university or corporation.

LED

Stands for Light Emitting Diode. The lower right of the Status Line in the Terminal are for LED spaces which are active as needed when ST-Talk Pro is operating in VT-100 or VT-220 Terminal modes. On real VT-100 and VT-220 Terminals there are, of course, four actual LED's. The functions served are the same, and are dependent upon the actual software which is taking advantage of these terminal modes.

LF Line Feed: a term going back to teletype days in which one had to issue one command for advancing the paper up a notch (a Line Feed) and another command for moving the printer head back to the beginning of a line (a carriage return).

Label

In AutoPilot you can GO TO the line you have indicated with a Label: the first character of the Label must be the underlined character (<S> while pressing the key to the left of the equal key). This is equivalent to GO TO line number, except there are no line numbers in AutoPilot programs. If the Label is given a meaningful name, that will make your life that much easier.

Left Mouse Button

The left button on the mouse. This is the button used for most purposes, including double clicking. The right mouse button (<RM>) is used in ST-Talk Pro for two principle purposes: click with the right mouse button anywhere in the Terminal or Editor windows and you will move to the Editor or Terminal functions, respectively. The second purpose is to load the Editor, which occurs when you click <RM> on any of the 10 Editor Buffer Icons to the right of the Editor window. If you need to reset the rate at which the mouse must be double-clicked (you find it requiring too quick a click), you can use CONTROL.ACC, the accessory which came with your computer; or do it from within QMI's Deskcart accessory, being sure to SAVE the Control Panel. If you are using the one supplied by Atari, be aware that there is a new (as of 12/87 or

so) version available on BBSs and the information networks. If you are using Atari's, be sure to 1) Save Desktop and then 2) see that CONTROL.ACC is booted each time you boot the computer, in order to automatically reset the settings which you saved.

<LM>
see Left Mouse Button

Macro
In general, a keyboard macro is a combination of key presses which can be initiated by a single key press. In ST-Talk Pro, keyboard macros are associated exclusively with the Function Keys, and each macro runs an AutoPilot program, rather than simply duplicating a series of key presses. You program the Function Key Macros through the Function Key item on the Terminal Select Menu. The file ST-TALK.FNK, put in the same directory as ST-TALK2.PRG, will load automatically on booting the program. Since you can also load a set of Function Key Macros through AutoPilot, the possibilities are endless.

Main Directory
Also called the root directory. This is the directory which is not itself a directory within another directory.

Mainframe
The term Mainframe used to refer to a computer which had certain kinds of processors and memory, but those distinctions have gone by the board with the advent of computers like the Mega 4 ST which has 4 megabytes of memory. Generally speaking, a mainframe is made to handle many users connected at once; a minicomputer is made to handle a few; and a microcomputer is made to handle one. There are exceptions to all the above.

Memory
Although the term "memory" can technically apply to information stored on disks (floppy disk or hard drive), the term when used alone typically refers to that part of your computer where information can be stored temporarily in the computer's memory, so long as the computer is turned on.

Modem
comes from the words MOdulate and DEModulate, which is technically what happens when the "ON and OFF" signal sent from the computer are translated into an audible tone (MOdulated) and then turned back into ON and OFF signals (DEModulated) by the Modem at the other end of the telephone line. 2400-baud is the current standard. If you are buying a modem, look for a "Hayes Compatible" model: the Hayes company has set a standard for the command set which is used to control the modem, and making the modem work with ST-Talk Pro will be much easier if it follows that standard.

Offline
When connected to information networks, you are paying a charge; and when connected with BBS's, you are preventing other users from using it. In each situation it makes sense to compose messages "offline", that is, when not connected to another computer. You can create the message in your ST-Talk Pro Editor and either upload it directly from there, or SAVE it in a file for uploading. The Upload Text function has options which are set in the Text options item of the Terminal Select Menu. <A>U will initiate a text upload.

Online
means you are connected with another computer.

Path
The Path is the list of directories one must travel through in order to reach the directory in which you now reside. In the Path

A:/STT_AUTO/QMI.AP, the file QMI.AP resides within the directory STT_AUTO on drive A. Similarly, the Path C:/STTALK2/STT_AUTO/QMI.AP means that the file QMI.AP resides within the directory STT_AUTO, which in turns resides within the directory STTALK2, which resides on drive C.

Postdialing String

Some modems, typically not Hayes compatible modems, unless you have a reason to reset your modem after you have dialed, require a "Smart String" to be sent after the number is dialed. This is called a Postdialing String. In the dial options dialogue in the Terminal Select Menu represents the number to be dialed with the up arrow (inserted in the line with <C>A), so that the Postdialing String would simply be inserted after the up arrow. Most often this will simply be blank in normal Hayes compatible usage.

Predialing String

To initiate dialing in the Hayes compatible modem, you typically have to give it the string ATDT (or if you are using pulse dialing, ATDP). [Actually, once you have used the AT command, you can leave it out in subsequent commands, so that DT or DP alone would be sufficient. Rather than create problems for special situations, it's easiest to use the AT in front of the command on an ordinary basis.] In the Dial Options Dialog of the Terminal Select Menu, you are given three long-distance alternatives, allowing you to use the alternative long-distance services; or if you have a frequently used area code in your Dialing Directory, simply insert the 1 and the area code. By doing this, you won't have to use the area code for every number in the data base, but will be able to make the selection by picking the dialing string option within a data base which corresponds to the before categories given in the dial options dialogue. If you are using a long distance service and you need to pause while it connects, in Hayes compatible language you can create pauses by inserting a comma in the string. The length of time it pauses for each comma can be set for your modem; the factory setting is typically about 2 seconds for each comma. This might vary for your modem so you might want to check this out. The Predialing Strings are also handy if you need to dial 9 to get an outside line: you would used ATDT9W and then the number, in typical usage.

Printer Icon

To the right of the Terminal window, the third icon from the bottom is the Printer Icon. When the letters on the paper Icon (so skillfully drawn on the printer) indicate ON, whatever is appearing on the screen will also appear on the Printer. This can be handy when you are searching lists of files for downloading. While you can easily switch to your Editor and check them out there (even while you are still receiving the list from the other computer), it's sometimes easier to have a hard- copy list to look at and make your selections.

Prompt

the symbol sent by the other computer asking you to respond.

Protocol

refers to an agreed upon method for transmitting information. There are protocols for displaying information on the screen (for example, the VT-100 protocol selected from within the Terminal mode item on the Terminal Select Menu), and protocols for error checking when transmitting files (for example the YMODEM protocol, selected within the Send or Receive File Dialogs).

QMI Fileselector
This is a replacement for the GEM Fileselector, which makes you type in the drive number. Directions for using the QMI Fileselector can be found in the Appendix on that topic.

Registered Copy
When you send in your registration to QMI, along with either $3 or your disk and $2, you will receive the background downloader which will allow you to download programs while editing files in the ST-Talk Pro Editor and even run other GEM programs. See the section on Registering Your Disk in the Introduction.

Right Mouse Button
The Right Mouse Button (<RM>) is not used in most GEM programs (partly because the operating system doesn't handle right mouse clicks very well). It is used in ST-Talk Pro to switch between Terminal and Editor modalities by clicking within the Terminal and Editor windows respectively. This takes the place of the <A>E keypress. It is also used to load the Editor buffers by clicking on the associated buffer icon to the right of the Editor window.

<RM>
see Right Mouse Button

RS-232
Refers to the configuration of wires which connect your modem to your computer. All you really have to know is that for a typical Hayes compatible modem, you can use an IBM modem cable right off the shelf.

<S>
means old down the Shift key while you type the key which comes right after this symbol.

Screen Dump
The print screen function in the ST-Talk Pro prints the actual character screen within the Terminal window (or the previous frame of the Terminal window). This is different than a Screen Dump where every pixel in the screen is reproduced on your printer: a screen dump would reproduce every bit of your entire screen, including the Menu Bars; and would take much longer. The purpose in print screen is to allow you to have a printout of material that's on the screen now or just was on the screen previously (you are given a FormAlert to that purpose).

Scrollable List
The GEM Fileselector and the QMI Fileselector are examples of Scrollable Lists. In general you can move the scrollable window up a frame by clicking on the gray area above or below the movable bar to the right of the Scrollable List. Clicking on the up or down arrow will typically move the list one item in the direction shown.

Self-modifying
The buttons and Menus with a ST-Talk Pro may change their titles from time to time depending upon the program function. For example, the Editor Select Menu has an item titled "Begin Select" which changes to "End Select" when you have already begun to select a portion of text.

Smart Modem
another name for Hayes compatible modems, which use "Smart Strings" to control the modem functioning.

Smart String
a string of characters which control the modems actions. For example, "ATZ" returns the modem to its default setting; "ATF" returns it to factory settings; and "ATDT" is used to notify the modem that the next characters coming in will be numbers to be dialed, using tone dialing.

Snapshot
Throughout the ST-Talk Pro manual you will find snapshots of screens: these are actual

pictures of the screen reproduced in the manual in reduced form.

Source Code
the text which is translated by the computer into actions the computer takes. In some languages the Source Code is translated into other kinds of instructions (compiled code); in other languages, including AutoPilot, the Source Code is run directly by what is called an interpreter program.

Status Line
Below the Terminal and Editor windows are Status Lines containing various pieces of information. The Status Lines are described in the beginning of the Terminal and Editor sections of this manual.

Sub-directory
This is a directory which resides within another directory. Also called a folder.

Subroutine
a portion of the program which can be called by name and run from elsewhere within the program. In AutoPilot, a subroutine begins with an '@'sign in the first column, followed by the name of the subroutine; and ends with an "@endsub" as the last line of the subroutine. When you want to run the routine, leave off the @ sign, just using the name as though it were an AutoPilot function.

Suffix
refers to the last three letters of a file name, which appear after the period. When typing in either the GEM or QMI Fileselector, typing a period will move you over to the place where those three letters can be entered. Suffixes are used to denote for a purpose for which files are used. A listing of Suffixes used by ST-Talk Pro is as follows:

.AP AutoPilot;

.DBF Dialing Directory Data Base File;

.DOC a documentation file, which can be readied by first word or WordWriter ST, or by the ST-Talk Pro Editor;

.FNK Function Key Macro File;

.HLP Help Files;

.IDX Dialing Directory Index File, which keeps things in order;

.OPT Options File, which must reside on the same directory as the ST-Talk Pro program;

.MNU the Menu File for the drop down dial Menu with the changeable items;

.PRG the ST-Talk Program itself;

.PTH the file containing the path names set in the set paths command, which is automatically created on the same directory as the ST-Talk Pro program;

.RSC Resource Files, you must have the monochrome or color resource file on your ST_TALK2.PRG's directory depending upon what monitor you are using. Monochrome resource is ST-TALKM.RSC, color resource is ST-TALKC.RSC.

Syntax
the order and relationship of terms within a language; with relevance here to AutoPilot, which is a programming language. The AutoPilot language specifies arguments for certain functions, which the function then uses as it performs its appointed duties. If the arguments are not provided, an error will occur, and you will be notified by a FormAlert as to the line of the AutoPilot program on which the error occurred.

Syntax Checker
AutoCheck, the Syntax Checker within AutoPilot, is turned on by clicking on that item in the Editor Help Menu. As the cursor reaches each line within the Editor buffer holding the AutoPilot program, the Syntax Checker looks to see that it is a valid AutoPilot line. Where there are references to

labels which have not yet been declared or to Subroutines not yet declared, the Syntax Checker can get a little mixed up.

System

This term can actually refer to many different things, depending upon the context. In most cases it means The Operating System (TOS see which), which is the core program forming the heart of the computer's operations.

Terminal Emulation

A Terminal used to refer to a piece of hardware, especially configured to interact with a mainframe computer. Terminal Emulation is when your computer is programmed to behave as though it were one of the specialized pieces of hardware. VT-100 and VT-220 Terminal Emulation modes are two of the most popular, and are included in ST-Talk Pro.

Terminal Mode

Refers to the Terminal Emulation Mode.

Text

Refers to characters contained on the screen or in a file. On the screen, this is in contrast to graphics; and in a file, this is in contrast to program or data files, both of which are called generically "binary" files, because their meaning is determined by the ones and zeros which the computer ultimately uses to create larger meaning.

Text Editor

The ST-Talk Pro Editor is a Text Editor, capable of entering and changing text. This is in contrast to a word processor which has extensive formatting capabilities for printing. You can set elementary printing options through that item in the Terminal Select Menu, but not the extensive options which a word processor would contain. If you just must control things like print size and italics from within the ST-Talk Editor, you can do so. Turn on Control Codes within the Editor Options Menu, and enter the appropriate codes directly into the text. You will need to know the proper codes by looking up in your printer manual, and then using control codes on, from the Editor Options Menu, to insert them. The method for entering non-text characters into the Editor is described under the Control Codes Menu item in the Editor Options section of the manual.

Text File

A text file is one with readable text characters in it; contrasted with a Vidtex graphics file or a program file, both of which are unreadable in the Text Editor.

Text Upload

also called a ASCII Upload, from a buffer or from a file, in which there is no error checking used. This can be handy when inserting a message to another computer, since from the other computer's point of view all that is occurring is that text is being sent, just as if you had typed it.

The Operating System (TOS)

Basic actions of the computer, such as reading and writing from disk, to the screen, and to the printer, are controlled by a very basic program called The Operating System. TOS includes the Graphics Environment Manager (GEM), which is actually a program which runs on top of a more basic program (the BIOS, or Basic Input/Output System).

Toggle

When a program function can't be turned off and on by clicking on the same button or Menu item, that action is called Toggling. Capture can be toggled off and on by clicking on the capture Icon to the right of the Terminal window; notice that OFF turns to ON and vica-versa.

TOS

Stands for The Operating System.

Transfer
to move a file from one computer to another; in other words, an upload or a download.

Turnkey
Refers to a system in which no system operations are required by the user. It is possible to configure ST-Talk Pro to be a Turnkey communications system through use of the Default AutoPilot program, STT2.AP, which is run when the program is booted. Public domain programs are available which will allow you to make ST-Talk Pro into an autobooting program, which will load automatically as you turn on your computer. This means that you can configure your system to run ST-Talk Pro and perform actions without any intervention by the user other than inserting the disk and turning the computer on.

Upload
To transfer a file from your computer to another computer. This can be either with error checking (using one of the error checking protocols such as XMODEM or YMODEM selected from the send file dialogue) or without error checking (a text or ASCII Upload).

Upper/lower Case
as contrasted with ALL CAPITAL LETTERS or all lower-case letters.

Vidtex
A protocol for displaying a particular kind of graphics on the screen, originated by CompuServe Information Service, and incorporated within ST-Talk Pro. When connected to CompuServe, you should have Vidtex toggled on (from the Terminal Select Menu), since CompuServe inquires whether Vidtex is turned on (without your knowing that it has done so), and only if it finds Vidtex is turned on will it allow you to use the CIS-QB download protocol option, which is very speedy and handy. DO NOT choose Vidtex Terminal Mode in the CompuServe Terminal Options (GO OPTIONS) setup menu, as this is a different creature from Vidtex Graphics.

VT-52
Another Terminal Emulation Mode similar to VT-100 but a little simpler. The VT-52 Emulation Mode, with a few Atari idiosyncracies, is present within TOS. If you find your cursor color changed after having been hooked up to a VT-100 programmed computer, go to the Terminal Mode, being sure to be hooked up to your modem (but not necessarily online), type <esc>B1, and you will find that things get back to normal.

VT-100
A Terminal Emulation Mode selectable from the Terminal Mode Icon, the second icon from the bottom on to the right of the Terminal window; or from the Terminal Mode item from the Terminal Select Menu. On CompuServe, be sure to set your CompuServe Terminal options (GO OPTIONS) for NO PARITY (or change your ST- Talk Pro parity setting to Even, from the Options Icon of the RS- 232 menu item of the Terminal Select Menu), or VT-100 won't work.

VT-220
A Terminal Emulation Mode selectable from the Terminal Mode Icon; as the number implies, it is a later development than VT-100.

Wildcards
Include ? and *. The ? wildcard stands for a single character occurring at the position where the wildcard is inserted. For example, f?x will find fox and fax. The * stands for any letter, or a combination of letters, from that position onward. F* will find fox, fax, f, and fmodem. In the QMI

Fileselector, wildcards can be used for the suffix only.

Window

A window in GEM is an area where text and graphics are displayed. Windows are sometimes resizable; in ST-Talk Pro they are not, for reasons having to do with speed of display. Windows can sometimes be scrolled, and this is the case in ST-Talk Pro. The Terminal Window can scroll one screen backwards, by clicking either on the arrow or on the gray area above the slider bar to the right of the window. The Editor window will move one screen upward or downward (if there is that much to move), also by clicking on the gray areas above or below the slider bar, respectively. To toggle from the Terminal to Editor windows, click anywhere in the window with the right mouse button (<RM>).

Word Processing

consists of text editing and output formatting. The ST-Talk Pro Editor has full text editing facilities, but not the print formatting capabilities that a full word processor would have. You can set printer options from within the printer options item of the Terminal Select Menu, to such things as margins to the left, right, and top and bottom of the page. You can use the Printer Initialization String to set font characteristics such as size and quality of printing. For information on setting the Printer Initialization string, see the information on Printer Options, under the Terminal Select menu.

Word Processor

Simply a program that runs on a computer. Sometimes this is a dedicated computer; most of the time it is a program running on a general purpose computer such as the ST.

XMODEM

An error checking protocol much in use in the microcomputer world. If you have the choice of using XMODEM CRC, go ahead and use it because it provides a much better check. If you select XMODEM CRC and the other computer is not capable of using it, ST-Talk Pro will adjust itself without further intervention by you.

YMODEM

full YMODEM includes batch transmission, in which the sending computer supplies the filename and the receiving computer just keeps plopping the files into the path which was supplied by its user. However, the term has also come to mean any transfer using the YMODEM error-checking protocol, whether or not Batch transfer is being used. ST-Talk Pro supports both methods; supply only a path if you click on BATCH in the Send or Receive File Dialogs.

XOFF

Computer systems have some agreed upon methods of interrupting operations, when one or the other computer has to pause for whatever reason. XON/XOFF is one of these methods. XOFF typically consists of <C>S, while XON typically consists of <C>Q. <C>X will abort most file upload procedures. On CompuServe, <C>C will interrupt what is going on. You will then be prompted as to whether you want to continue or resume at various places within their system. If XON/XOFF is toggled ON in the RS- 232 Options menu (Options Icon; or Terminal Select Menu), moving the mouse into the menubar area will send an XOFF, so that you won't miss transmissions from the sending computer due to the ST's inability to process information when the menubar is active.

XON

What you do after XOFF if you want to resume. Typically a <C>Q.

$1,000 ii
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